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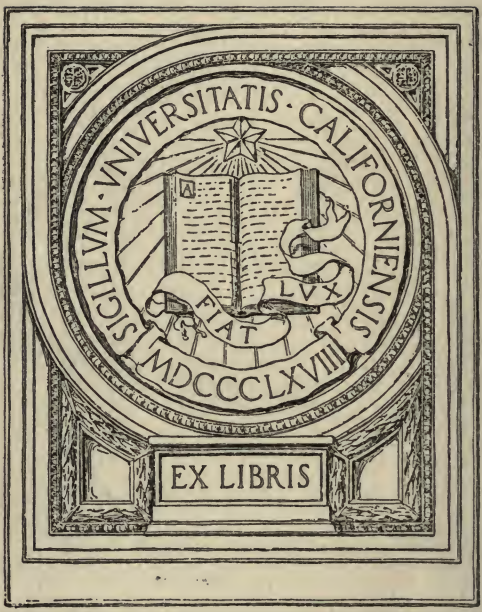
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CHAPTERS

ON THE

THEORY AND HISTORY OF BANKING.

BY

CHARLES F. DUNBAR

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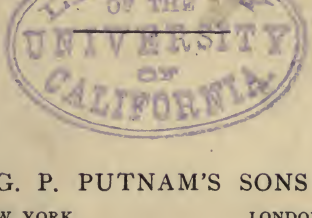

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PREFACE

THE preparation of the following chapters is the result of the need of some convenient statement of ordinary banking operations, felt by the writer when lecturing upon banking to a large class of students in the elements of political economy. To the chapters devoted to such operations it was found useful to add a series of historical chapters on certain of the great banks and banking systems, partly for the easy illustration of theory and partly to supply the want of any good manual of banking history.

Eight of the chapters were printed in 1885 for the use of classes in Harvard University, but were not then given to the public. To these have now been added an introductory chapter, a chapter on combined reserves or the system of Clearing-House loan certificates, and one on the Bank of Amsterdam. The whole has been revised and the notices of current history brought down to the present date, and the book is now laid before students and readers with the hope that it may aid in the systematic study of a subject, the treatment of which by writers

upon economics is generally either too summary or too diffuse for ordinary purposes.

The writer has annotated his text with a freedom which perhaps demands some apology, desiring to make his notes answer the double purpose, of informing the reader as to the sources from which statements are drawn, and of inviting him to explore the sources more deeply than was possible within the limits of the present publication.

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UNIVERSITY OF CALIFORNIA

CHAPTERS ON BANKING.

CHAPTER I.

INTRODUCTORY.

THE operations of banking, as the system has been developed in the last two centuries, appear at first sight to be singularly complex and difficult of comprehension. This is not due, however, to any mystery in the operations themselves, but is the result of their multiplicity and of the varied conditions under which they take place. The wants which banks satisfy are of a simple kind, sure to arise early in the history of any commercial or industrial community in which there is mutual confidence among men; and the satisfaction of these wants is a business easily established in what might well be regarded as an almost primitive condition of trade. The transactions by which these wants are satisfied are, moreover, as simple as the wants themselves, and are speedily reduced to such routine as to lead Adam Smith, in a well-known passage, to rate "the banking trade" as one of the few which, in his judgment, could be brought to

Simplicity of banking operations.

such uniformity of method as to be safely conducted by a joint-stock company.

The leading wants to be provided for by banks are, first, loans upon a considerable scale, required by individuals embarking in enterprises beyond their own means; and, second, the temporary employment of money which is not required by the owner for immediate use, or at least the means of safely keeping it. Some agency for lending and some place of deposit are called for as soon as commerce begins to move in a regular course. With these may be required some system for simplifying the currency of the community, or for giving it an ascertained value, but this is after all a secondary matter. The primary and indispensable functions to be provided for are those of lending and of receiving on deposit, and it is these which have given rise to modern banking.

These functions, it is clear, imply no very complex operations. They require prudence, integrity, and patience, but they have no mystery. The banker who lends, or who engages to supply cash to his customer as it may be called for, needs to be sure of the solvency of his borrower and of the goodness of the security received, and must have the evidence of the transaction made indubitable, its terms clearly fixed, and the record of it complete and exact. When he receives cash on deposit, or collects for others cash which is due and holds it until it is wanted by the owners, he must in like manner be sure that the evidence of every transaction is regular and placed beyond doubt, and that its record is

precise and systematic. And when, as an extension of his system of holding deposits, he recognizes the right of a depositor to transfer his deposit or any part of it to another person, and thus to make a payment to the latter, the operation of transfer must be closely followed and the resulting changes in the banker's accounts must be made with fidelity and minute accuracy. But in no one of these cases does the actual transaction present any more difficulty of comprehension than the simple payment or receipt of money. The questions of prudence,—how much and to whom it is advisable to lend, and upon what terms, how far it is safe to assume that deposits will be left undisturbed, and to what extent it is needful to be prepared for demands by depositors,—require all the light that trained sagacity and experience can throw upon them, as do the questions relating to the conduct of business in many departments; but the essence of the transactions themselves, to which the judgment of the banker is applied, is simple.

As a natural consequence of the simplicity of the operations involved in lending and in receiving deposits, it is probable that they have been undertaken and carried on in every old country by individuals long in advance of any public establishments, and long before the chroniclers of history thought it worth while to notice phenomena of such a humble order. Private lenders established banking in Venice two centuries before the Senate opened its first public bank of deposit. Banking was in like manner practised by

Banking first carried on by individuals.

individuals in Amsterdam long before a special class of evils led the city to establish the famous Bank of Amsterdam. And banking of a well-defined modern type was introduced by the London goldsmiths at least a generation before the opening of the Bank of England. Instances of the same sort could easily be multiplied, tending to show that in other countries also banking has had its origin in the effort of individuals to supply certain rather primitive wants of an advancing community, and that the process of satisfaction was by means of a few thoroughly simple operations. And such as the operations of banking were two or three centuries ago, they have continued to be in the midst of the changes and the enormous development of the present century.

It is probable, however, that in most modern communities the individual wants which banking undertakes to supply have ceased to be the exclusive object of attention, and that the general influence and ulterior effects of a banking system, not originally foreseen and long a matter of dispute, have taken the leading place among the reasons for introducing such a system. The first bankers probably had little thought of affording encouragement or applying a stimulus to the industry of the community as a whole. When they began, however, to lend their money systematically to merchants or the producers of goods, they began to give the command of capital in the enterprises where, for the time being, it was most called for and presumably most needed. When they increased their loans of this sort, by means of the

Ulterior effects of banking.

funds left temporarily in their care by persons depositing with them, they began to give to industry the benefit of capital which would otherwise have remained idle, or to secure the more speedy application of capital slowly seeking employment. The use of their own notes as the medium for making their loans, in a manner strictly analogous, gave to their borrowers the command of capital which the fluctuating body of noteholders might forbear to demand. And their practice of discounting the bills received by dealers from their customers tended to a rapid organization of credit, and, by giving the dealer the immediate use of that which was due to him at some time in the future, shortened the period required for "turning his money" and undertaking some fresh enterprise. It is obvious that the bankers created no new capital by their lending and deposit-holding, but it is equally plain that they directed the streams of capital to the enterprises and industries requiring such support, and that they quickened the succession of commercial and industrial operations. A given amount of capital was thus made more effective, so that the result of the introduction of banking in any community was the equivalent of a considerable increase of capital, although not implying any real increase in the first instance.

The stimulus thus applied by banking to the general commercial and industrial movement of any community, whether young or old, has long been clearly seen; and it is this effect of operations, at first undertaken simply with reference to the de-

mands of individual convenience, that now chiefly claims attention and excites interest. This stimulus is not unattended by risk. Deposit-holding and the increase of notes are alike operations of credit. They imply, as conditions of their existence, a certain growth of mutual confidence in any community, and a certain degree of domestic peace; and under conditions otherwise similar, nations will differ in their resort to such operations, as the national temperament is more or less sanguine and as tradition and habit have prepared the way, or the reverse. But to whatever extent credit is thus used, it introduces not only the dangers of misplaced confidence, but the greater danger coming from the spirit of adventure. The tendency under the keen spur of a developed banking system to carry enterprises based upon credit beyond the point of safety, the infection of an entire community by the fever of speculation, are too familiar for comment, and the errors of bankers in aiding and encouraging that which they should have striven to repress or control, have at times brought the utility of banking itself into question.

Stimulated credit has its dangers.

The modern world, however, does not forego the use of any great agency because it is attended by danger. To secure a balance of gain by minimizing the risks, always recognizing their existence and their deplorable character, has been the aim of most commercial communities in dealing with banking during at least four generations. The ignorant hostility to the system itself instead of its abuses, which only thirty years ago appeared in the constitutions of

several of the United States, has now given way to a wiser appreciation of the great services rendered by banks and bankers in the development of a country like this.

The difficulty of properly weighing the advantages and the risks of banking has been greatly increased by the reckless imprudence with which banks have so often managed their issues of notes, to which allusion has already been made. Such issues, although not a necessary adjunct of the business of lending and of deposit-holding, are a natural and, in some conditions of society, a usual adjunct. Where they are made, the issuing banks or bankers at once become responsible for an important part of the visible circulating medium of the country. Their mistakes or wrong-doing may affect a multitude of persons having no intentional or conscious share in or relation to the concerns of any bank; and may easily throw the affairs of a community into confusion. It is true, as we shall see hereafter, that the steps by which a bank issues its notes do not differ from those by which it assumes other less observed liabilities, and that its obligations in the two cases are the same in essence. Still, the wide diffusion of an issue of notes and the more visible and notorious nature of the evils resulting from its mismanagement make such issues the object of extreme jealousy, and have often led to the indiscriminate condemnation of all banks. Although, therefore, the issue of notes is not one of what we have called "the primary and indispensable functions" of banking, it is a function which fills a

Hence, notes often viewed with anxiety.

large space in most discussions of banking theory, as well as in the history of the great banking systems and in legislation.

The starting-point in the present exposition of the subject then must be an examination of the transactions involved in lending, deposit-holding, and note issue or circulation.

CHAPTER II.

DISCOUNT, DEPOSIT, AND ISSUE.

A BANK may be described, in general terms, as an establishment which makes to individuals such advances of money or other means of payment as may be required and safely made, and to which individuals entrust money or the means of payment, when not required by them for use. In other words, the business of a bank is said to be to lend or discount, and to hold deposits. With these two functions is often combined a third, that of issuing bank-notes, or the bank's own promises to pay, for use in general circulation as a substitute for money.

The three banking functions.

The object of the present chapter is to inquire into the real nature of the operations, thus roughly classified and usually described by the terms Discount, Deposit, and Issue; and for this purpose we shall analyze the transactions attending the ordinary and simple case of a loan made by a bank to one of its customers.

The borrower who procures a loan from a bank does so in order to provide himself with the means, either of making some purchase, or of paying some debt. He seeks, therefore, to obtain, not necessarily

money, but a certain amount of purchasing power in available form, or of whatever may be the usual medium of payment, measured in terms of money. If we suppose him to be a merchant, buying and selling goods upon credit in the regular course of his business, he is likely at any given time to have in his hands a greater or less number of notes, not yet due, signed by the purchasers to whom he has heretofore made sales; and it is in the form of a loan, made upon the security of one or more of these notes and giving him immediate command of the amount which will become due upon them in the future, that he is likely to procure what he needs from the bank. This loan may be supposed to take the form of what is termed a discount; in which case, in exchange for the note "discounted" the borrower is entitled to receive from the bank the amount promised in the note, less the interest on that amount computed at an agreed rate for the time which the note has still to run.[1] The discounted note becomes the property of the bank, to which the promisor is henceforward bound to make

Discount analyzed.

[1] If, *e. g.*, the note discounted promises to pay $2,500, has 87 days to run, and the agreed rate is 6 per cent., then the interest to be deducted is $36.25, and the proceeds received by the borrower are $2,463.75. This process, which is commonly used and is known as "bank discount," gives a result somewhat different from that of discount in the strict sense of the term. Strictly speaking, discount consists in finding that sum which, if put at interest for 87 days at 6 per cent., will then amount to $2,500, or, in other words, in finding the present worth of $2,500 due under the conditions stated. As this present worth is $2,464.27, the established practice gives to the bank a slight profit in addition to that afforded by true discount. See on this point Agricultural Bank *vs.* Bissell, 12 Pick. 585.

payment at maturity; and this payment when made obviously restores to the bank the amount advanced by it in exchange for the note, together with the interest which was the inducement for making the exchange.

It is now clear, however, that the operation which we have described, although spoken of as a loan by the bank to a borrower, is in fact something more than a loan. The note when given was evidence that its holder owned the right to receive at a fixed date a certain sum of money, and this right the so-called borrower has ceded to the bank. Passing over for the present all question as to what he has received in exchange, his cession of property by sale is as distinct and complete as if he had sold a bale of cotton to another merchant, instead of selling to a bank his right to receive money in the future. It is true that in parting with the note he probably endorsed it, and thus bound himself to make good its amount in case the promisor should fail to do so; but he might equally bind himself by some warranty given to the purchaser, when selling any other description of property. The note has ceased to be his, and now takes its place among the investments or securities of the bank, although custom may lead to its classification as a "loan or discount."[1]

Is in essence a sale to the bank.

The operation which we have here presented in its simplest form may easily change its shape according

[1] In an account of the Bank of England, the note supposed, if taken, would have to be classified under "other securities," together with bonds or stocks owned by the Bank. See *post*, chapter x.

to circumstances. Thus, instead of offering for "discount" the notes of his customers, our merchant may offer his own note for the sum which he wishes to obtain, and attach to it, as security for its payment at maturity, one or more of the notes of his customers. In this case the principal note, his own, becomes the property of the bank, the right to receive from him at its maturity the sum promised in it being the real object of sale; and the attached notes, originally received by him for merchandise and now pledged to the bank as collateral security for the performance of his contract, continue to be his property, subject to the right of the bank to be indemnified therefrom in case of his failure. So, too, he may offer his own note, securing it by the pledge of bonds, stocks, or other valuable property, the ownership of which he does not part with, while at the same time he sells as effectually as in the first case the right to receive from him a certain sum at a fixed date. Or, instead of the note of hand which we have supposed to be used, some other kind of negotiable paper, as, for example, the bill of exchange, may be preferred by local usage as the evidence of commercial obligation. Still, whatever the form of the transaction by which a bank may make "advances" or "loans," it will be found that in every case a right to demand and receive a certain sum of money has been acquired by the bank for a consideration, and that the transaction was, therefore, in essence an exchange of rights.

We now have to consider what it is that the bank gives in exchange for the right to demand and

receive money at a future time, acquired by it under these circumstances. To return to our first and simplest case of so-called discount; the proceeds of the discounted note, or its nominal amount less the interest for the time for which it is to run, are in the first instance placed to the credit of the merchant, to be drawn out by him at once or at different times, as convenience or necessity may dictate. In thus crediting him with the proceeds, the bank plainly gives to him simply the right to call upon it at pleasure for that sum of money. Whether this right is exercised at once by demanding and receiving the money, or whether the exercise of it is postponed as regards the whole or a part of the amount, in either case the right to demand, or to "draw," is the equivalent received by the merchant in exchange for the right sold by him to the bank, of which the note discounted was the evidence. And the sum which he is thus at any time entitled to call for, so long as it stands to his credit, is said to be deposited in the bank, or, to be a deposit standing in his name. So, too, in other cases of so-called "loans" or "discounts"; whatever form they take and whatever the collateral security held by the bank may be, the operation is after all essentially an exchange of rights, whereby the bank acquires the right to receive money, or the legal tender of the country, at some future time, and the individual acquires the right to call for money or legal tender at pleasure. The result is to give to him that immediate command of purchasing power or of the usual medium of payment which, as we have said, is the

Deposit, arising from discount,

real object sought by him; but at the outset this result is usually secured and the relations of the bank and the "borrower" are settled, by the sale of one right for another, and without the intervention of money or any of its tangible substitutes.[1]

or from some other operations,

But the deposit may owe its origin to a different operation from that which has just been examined. It happens every day that the merchant, having cash in hand, prefers not to hold it in his possession until it is required for use, but to "deposit" it with the bank where he usually transacts his business, until he needs to use it. In this case, when he makes his deposit, the property in the money or substitutes for money actually handed in by him passes to the bank, and he receives in exchange the right to demand and receive at pleasure, not that which he paid in, but an equivalent amount.[2] Here then, as in the former case, the transaction is in effect a sale, although the use of the word "deposit" seems at first to justify an entirely different idea of its character.

The other leading operations of banks, when

[1] The less usual case of a loan made in cash does not create a a deposit, but is a case of issue if the bank gives its own notes to the borrower. It is, however, the sale of a right for a right in every case except where the loan is made in actual money, when it becomes the sale of a right for coin.

[2] It is true that money may be left as a "special deposit" with a bank, just as plate, jewels, or other valuables may be, in which case, the identical money deposited is to be returned, and the bank consequently does not acquire the property in the thing deposited, but is merely entrusted with its temporary custody. This, however, is not a banking operation, and the deposit in this case is made with the bank, not because it is a bank, but because it owns a strong vault.

analyzed, can also be resolved into cases of the exchange of rights against rights, or of rights against money. As, for example, when the bank, for the convenience of its customer or depositor, undertakes to collect a note due to him by some third party, in which case the amount paid to the bank in money by the promisor is passed to the credit of the promisee as a deposit. Here the bank has received money for the account of the depositor, and has given to him in exchange a right to draw at pleasure for the amount or any part thereof, the property in the money actually paid having passed absolutely to the bank in exchange for the right to draw. And again, when the bank buys from a merchant a bill of exchange, or when it sells a bill of exchange drawn by itself on some correspondent, it effects an exchange of money against a right, or of a right against money, strongly resembling those already considered. And so, too, if in any of these cases any substitute or equivalent for money is used, instead of money itself, the transaction is still an exchange of a right on the one side and some means of payment on the other, the latter becoming the property of the bank.

We have thus far, for the sake of simplicity, spoken only of the "rights to receive" money, bought by the bank in one class of cases, and sold by it in another. But where there is a right to receive on the part of a creditor, there is a corresponding duty to pay on the part of the debtor; and these rights or credits, when viewed from the other side, are, therefore, debts or liabilities. The

deposit which is credited in making a loan is accordingly a liability to pay on demand, assumed by the bank in exchange for a security promising a payment to the bank in the future; and the deposit credited upon the receipt of cash from the depositor is a similar liability, assumed in exchange for so much money or so much of its substitutes. In short, as any addition to the loans of a bank is an increase of its investments or resources, so any addition to its deposits is an increase of its debts or liabilities.

means the bank's liability to pay.

A little consideration of the manner in which notes are issued by banks will show that in the bank-note we have only another form of liability, differing in appearance, but not in substance, from the liability for deposits. The bank-note is the duly certified promise of the bank to pay on demand, adapted for circulation as a convenient substitute for the money which it promises. It is issued by the bank, and can be issued only to such persons as are willing to receive the engagement of the bank in this form instead of receiving money, or instead of being credited with a deposit. Thus the so-called borrower, who in the first instance has been credited with a deposit and to whom the bank is therefore to this extent liable, may prefer to draw the amount in notes of the bank and to use them in making his payments. But, in this case, it is plain that the liability of the bank is changed only in form; it is still a liability to pay a certain sum of money on demand. And so if the depositor pays in money and receives

Issue is the same, in all but form.

notes,[1] or receives notes in satisfaction of a demand of any kind against the bank, he, in fact, foregoes the use of the money itself and consents to receive in its stead a promise to pay upon demand, and to receive the evidence of that promise in the form of notes. The question, in which form he shall hold his right of demand against the bank, is one to be decided by the nature of his business or by his present convenience, but plainly the decision of this question in no way alters the relation between himself or any transferee of his right, on the one hand, and the bank on the other. The notes issued by a bank are thus a liability distinguishable in form only from its liability for deposits, and the functions of deposit and issue, spoken of at the opening of this chapter, instead of being distinct, as is often assumed, are one in substance.

In the operations which have now been considered the subject-matter involved is in every case either money or contracts for the payment thereof. No form of dealing in merchandise or real property comes properly within the province of banking. And, inasmuch as a contract for the payment of money may be viewed either as a credit or as a debt, according as it is looked at from the one side or the other, banking is sometimes described as the business of dealing in credits and sometimes as that of dealing in debts. For the transaction of this business in the modern world both of the functions

[1] In early English banking this was a common practice and no doubt explains the phrase "take up money on their notes," used in legislation. See Bagehot, *Lombard Street*, p. 98.

"discount" and "deposit" are indispensable. In order to be a bank, at the present day, an establishment must carry on the purchase of rights to demand money in the future, or securities; and it must also use in some form or other its own engagements for the payment of money upon demand.[1] If it practises the former only, it is simply an investor of its own money, as any private individual may be; if it practises the latter only, it may indeed be said to be a bank of the obsolete type of the Bank of Amsterdam, but it then plainly ceases to answer one of the chief purposes of a modern bank, viz., that of enabling individuals to convert into immediate purchasing power the debts which are due to them in the future. The use of the third function, however, that of issuing notes, is not indispensable to the existence of a bank, for, as has been shown, issue is but a modification of deposit, and is made for convenience and not from necessity. There are conditions under which the liability of the bank in the form of notes is desired for use, and there are also conditions under which the liability in the form of deposits better serves the convenience of individ-

Discount and deposit essential functions.

Issue not essential,

[1] See in Bagehot's *Lombard Street*, p. 212, a remark that the Rothschilds are great capitalists, but are not bankers. The definition of a bank by the internal-revenue act of the United States of 1866 includes "every person, firm, or company having a place of business where credits are opened by the deposit or collection of money or currency, subject to be paid or remitted upon draft, check, or order, or where money is advanced or loaned on stocks, bonds, bullion, bills of exchange, or promissory notes, or where stocks, bonds, bullion, bills of exchange, or promissory notes are received for discount or sale."—14 *Statutes at Large*, p. 115.

uals or of the community. Many banks in every country, therefore, carry on a large and successful business without making any issue of notes whatever.[1]

It must be added that incorporation by law is not a necessary condition of the existence of a bank. Discount and deposit, and if no legal prohibition exists, issue also, may be carried on by individuals and firms as well as by incorporated companies. It is true that in discussions of banking it is usual to give almost exclusive attention to incorporated banks, partly because they usually hold a more conspicuous position, and partly because their affairs are in some degree open to official inspection, so that the details of their business are known, to some extent, whereas the transactions of private banks are usually known only to the persons concerned. It is none the less true, however, that in the economic effects of their transactions the two kinds of banks do not differ, and that neither can be neglected in an examination of the economic problems presented by any community in which it is found to exist.

nor incorporation by law.

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[1] The Comptroller of the Currency reports that in 1890 the banks in operation in the United States, excluding savings-banks, were as follows:

	Number.	*Capital and Surplus.*
State Banks and Trust Companies	2,250	$346 millions.
National Banks	3,540	864 "
Total	5,790	$1,210 "

Of these banks the national banks alone are authorized by law to issue notes.

In November, 1882, the number of private bankers paying the tax then levied on deposits was 3,412. The term is applied loosely, and the present number of such bankers is not easily estimated.

CHAPTER III.

BANKING OPERATIONS AND ACCOUNTS.

HAVING thus taken a general view of the nature of banking operations, it is now necessary that we should enter upon the consideration of some of their details.

Capital: no rule for its amount.

For a bank, as well as for any other considerable establishment, it is requisite that a capital should be provided at the outset. There can be no constant proportion between the amount of this capital and the extent of the business which may be built up by its means. We can only say that, other things being equal, the larger the business that can be carried on with safety with a given capital, the larger will be the field from which profits can be earned, and the higher the proportion which the profits will bear to the original investment; but the point at which the extension of the business passes the line of safety, must be determined by the circumstances of the particular bank, by the kind of business carried on by those dealing with it, and by the condition of the community in which it is established. The attempt has sometimes been made to limit by law for incorporated banks the proportion of transactions for a given

amount of capital,[1] but no such provision has any foundation except a conjectured average, too rough to be of service in any individual case. (In this respect, as in so many others, the judgment of the persons most interested, acting under the law of self-preservation, is far more trustworthy than any legislative decision.)

The capital thus to be provided at the outset is, of course, in the case of a private bank, the contribution of the partners, as in any other undertaking. In the case of an incorporated bank the capital is divided by law into equal shares or units of fixed amount; as *e. g.*, under the law of the United States, a capital of $100,000 is divided into 1,000 shares of $100 each; and these shares are contributed by the individual shareholders, in such proportion as they please. The law may as a matter of public policy limit the proportion of capital stock to be owned by any one individual or firm, and it may also limit the liability of shareholders for debts due by the bank, in case of its failure; but in general, in the absence of special provisions to the contrary, the powers, rights, and liabilities of every shareholder are now usually determined by the number of shares of the stock contributed or owned by him. In the election of directors and of other officers for the immediate management of the business, every share entitles its owner to cast one vote; the dividend of profit is divided in the ratio of shares owned, and

Shares and shareholders.

[1] *E. g.*, the law in Massachusetts formerly limited loans to double the amount of the capital. See *Revised Statutes of 1860*, c. 57, § 25.

contributions to meet losses, if required by law, are called for in the same ratio.

The capital subscribed by the intending shareholders must necessarily be paid in in money or in the legal tender of the country. It is not necessary that the whole should be paid in at the outset, but the payment of the whole usually precedes the full establishment of the business; and, in the case of incorporated banks, the law often requires that some definite proportion, as *e. g.*, one half, shall be paid in before the opening of business, in order to insure good faith and a solid basis for the business undertaken.[1]

If, now, we undertake to represent by a brief statement of account the condition of a bank having a capital of $100,000 paid in, in specie, on the morning when it opens its doors for business, we shall have the following:

Liabilities.		*Resources.*	
Capital . . .	$100,000	Specie . . .	$100,000

Capital viewed as a liability.

It may at first sight appear to be a contradiction in terms, that the capital should be set down as a liability and not as a resource. But we must here distinguish between the financial liability for what has been received from

[1] The English joint-stock banks present some remarkable cases of partially paid capital. Thus the largest, the London and Westminster, has £20 in the £100 paid up on its shares, and the London Joint-Stock Bank has £15. In these cases, the business having been fully established by means of a part only of the nominal capital, the liability of the shareholders to contribute the remainder in case of need constitutes a species of guaranty fund of great amount.

the shareholders and the right of property in the thing received. The bank has become accountable to its shareholders for the amounts paid in by them respectively, but the money actually paid in has become the property of the bank; or, in the language of accountants, the bank has become *liable* for its capital, and the money in hand is for the present its *resource* for meeting this liability, or for explaining the disposition made of what has been received.

As the bank requires banking-rooms and a certain supply of furniture and fixtures for the convenient transaction of its business, we may suppose it to expend $5,000 of its cash in providing this "plant." The property thus procured, with the remaining $95,000 in cash, will then be the aggregate resources by means of which the capital is to be accounted for, and the account will stand as follows:

Liabilities.		*Resources.*	
Capital . . .	$100,000	Real estate, furniture, fixtures, etc. . .	$5,000
		Specie	95,000
	$100,000		$100,000

The bank, however, cannot answer the purposes of its existence, or earn a profit for its shareholders, until its idle cash is converted into some kind of interest-bearing security. Nor is it enough that a permanent investment of the ordinary kind should be made, as by the simple exchange of the cash for government bonds or railway securities. It is the chief business of the bank to afford to purchasers and dealers the

For profit, credit must be used also.

means of using, by anticipation, funds which are receivable by them in the future, and this implies both the purchase of private securities or "business paper" to a considerable extent, and also frequent change and renewal of purchases. Moreover, while the private capitalist finds it advantageous to make simple investments of a permanent sort, this would plainly be insufficient for the shareholders of a bank, who have to pay from its profits some serious expenses of management, and need, therefore, a larger field for earnings than the ordinary returns on their capital alone. The bank being obliged then to extend its operations beyond the amount of its capital, is compelled for this purpose to make use of its credit. In fact, it is only by such a use of its credit that the establishment becomes in reality a bank.

Commercial paper.

Most of the conditions of the case are best answered by the "discount" of commercial paper as above described. The time for which such obligations have to run varies with the custom of the trade which gives rise to them, but is in most cases short enough to imply early repayment to the bank. And even where custom gives the paper longer time, if the paper itself is used only as a collateral security, the note which is the actual object of negotiation with the bank is by preference usually made not to exceed four months. It is easy then to arrange the purchases of paper with reference to the times of maturity, so as to provide for a steady succession of payments to the bank, and thus facilitate the reduction of the business, if necessary, or its direction

into new channels, as prudence or good policy may require. The certainty of prompt payment at maturity, needed for this end, is presented in a high degree by the paper created in the ordinary course of business.[1] Independently of the collateral security which the bank may hold, the written promise of a merchant or manufacturer to pay on a fixed day is an engagement which involves the credit of the promisor so far that failure is an act both of legal insolvency and of commercial dishonor. Selected with judgment, then, such paper is not only the investment which most completely answers the purposes of the bank's existence, but is probably as safe as any investment which could be found.

Other investments.

It may easily happen, however, that the bank may find it desirable to invest a part of its resources in some other form, either because good commercial paper cannot be procured in sufficient amount, or as a matter of policy. In this case it will purchase such other securities as offer not only complete safety of investment, but the possibility of easy conversion into cash in case of need.[2] In this

[1] The reports of a large commercial agency show that, for fifteen years, 1875–89, the number of failures in the United States was a little over one per cent. of the whole number of houses reported as in business. For a curious estimate showing that the liabilities of failed firms in 1874 amounted to less than one fourth of one per cent. of the total commercial liabilities of the country for the year, see *Commercial and Financial Chronicle*, February, 1875, p. 129.

[2] See in the reports of the Comptroller of the Currency, the "United States bonds on hand" and "other stocks and bonds" held by the national banks and amounting to nearly $118,000,000 in October, 1890. Compare also the "government securities" held by the banking department of the Bank of England.

country United States bonds, and many descriptions of State, municipal, and corporation bonds might answer this purpose. Stocks would more rarely answer it, being more liable to the fluctuations in price caused by misfortune or the ordinary vicissitudes of business. Mortgages of real estate, however, would not be admissible, except when held as a security, collateral to some other which is more easily convertible, for even when the mortgaged property is so ample and stable as to insure the goodness of the mortgage, the conversion of the mortgage into cash by sale is not always easy, and is especially difficult at those times when the bank most needs to have all its resources at command. Indeed, the danger to be apprehended from the locking up of resources, in securities which may be solid but are not easily realized, is so great, that it has been said to be the first duty of the banker to learn to distinguish between a note and a mortgage, his business lying with the former. Real estate, of course, cannot be regarded as a banking security, however desirable it may be as an investment for individuals, for it is not only subject to great fluctuations in value, but is at times unsalable; and the law of the United States therefore wisely prohibits investments in it by the national banks, except so far as is necessary for the accommodation of their business.[1]

The results of the process of investment in commercial paper and in other securities are best understood when we trace the effect in the account of the

[1] See *Revised Statutes*, § 5137.

bank. Taking then the account as it stood on page 23, let us suppose that the bank buys paper or securities from those dealing with it, or, in the common phrase, makes "loans to its customers," to the amount of $90,000, the paper being in many pieces and having various lengths of time to run, but averaging about three months. Supposing the interest to be computed at six per cent., we should have the account changed by the operation as follows:

Changes of account, caused by loans,

Liabilities.		*Resources.*	
Capital . . .	$100,000	Loans	$90,000
Undivided profits .	1,350	Real estate, furniture,	
Deposits . . .	88,650	fixtures, etc. . .	5,000
		Specie	95,000
	$190,000		$190,000

Here we have the securities which certify the right of the bank to demand and receive $90,000 at a future date placed among the resources; the net proceeds of the securities, or the aggregate of the sums which the bank holds itself liable to pay for them on demand, stand among the liabilities as deposits; and the interest deducted in advance, or the profit on the operation, which the bank must at the proper time account for to the stockholders, also stands as a liability.[1] This, however, is the condition of the account at the moment of making the investment,

[1] As this profit is not realized until the discounted paper is finally paid, the interest deducted in advance is often carried to a separate account for the time being, to be transferred later to the undivided profits. This method is not universal, however, and in the present discussion the simpler statement appears to be sufficient.

when the bank has made its purchase of securities by merely creating a liability. As this liability is real and must be met, so far as the depositors at any time see fit to press it, let us suppose that depositors call for cash to the amount of $15,000, and we shall have a further change in the account as follows:

and by the withdrawal of deposits.

Liabilities.		*Resources.*	
Capital . . .	$100,000	Loans . . .	$90,000
Undivided profits	1,350	Real estate, etc.,	5,000
Deposits . .	73,650	Specie . . .	80,000
	$175,000		$175,000

It is clear that, unless the enforcement of the liability for deposits and consequent withdrawal of specie goes much farther than this, the bank can safely increase its loans or its purchase of securities, although its method of doing so is by the increase of its liabilities. We will suppose it, therefore, to have expanded its affairs until it has reached something like the average condition in 1888–89 of those banks in the United States, which, being incorporated under the laws of the several States, are not authorized to issue notes. It will then stand thus:

Liabilities.		*Resources.*	
Capital	$100,000	Loans	$305,000
Surplus	29,000	Bonds and stocks .	23,000
Undivided profits	10,000	Real estate . . .	15,000
Deposits . . .	305,000	Other assets . .	20,000
		Expenses . . .	1,000
		Cash items . . .	
		Specie	80,000
		Legal-tender notes	
	$444,000		$444,000

Postponing for the present the consideration of some terms which here occur for the first time, it appears from the above account that purchases of securities have been made to more than three times the amount of the capital, and that this has been effected chiefly by the creation of liabilities in the form of deposits. What determines the limit to which this process can be carried?

Increase of loans limited,

If depositors seldom demanded the payment to which they are entitled, but were contented with the mere transfer of their rights among themselves as a conventional currency, the bank might dispense with holding any large amount of specie or cash in any form and keep most of its resources employed in its productive securities. The expansion of the deposits would then resemble in its effects the expansion of any other currency and might go on until a check should be interposed by the consequent rise of prices and demand for specie for exportation. And it is true, as we shall see, that in communities where banking is largely practised, the use of deposits as currency by transfer from hand to hand is so extensive, that a bank in good credit can rely upon their being withdrawn so slowly, or rather to so small an extent, as to make it unnecessary to have cash in readiness for the payment of more than a small proportion at any given moment. But in a period of financial disorder or alarm, withdrawals may be made earlier or more frequently, and a larger provision of cash may be needed for safety, than at other times; the kind of business carried on by depositors may expose one bank, or the banks in one place, to heav-

ier occasional demands, or may on the other hand make demands steadier, than is the case elsewhere; and a city bank may be more subject to heavy calls from depositors than a country bank. In general, then, for every bank, in its place and under the circumstances of the time, there is some line below which its provision of cash cannot safely fall. This provision of cash, which in the account last given includes the cash items, specie, and legal-tender notes, is called the reserve, and the necessity of maintaining a certain minimum reserve fixes a limit to the ability of the bank to increase its securities. For obviously any increase of securities, that is, of loans or bonds, must ordinarily be effected, either by an increase of deposits, or by an actual expenditure of cash. In the one case the proportion of reserve to demand liabilities would be weakened by the increase of liabilities; in the other it would be weakened by the decrease of cash. If, then, the reserve were already as low as prudence would allow, or were threatened by approaching heavy demands from depositors, no increase of securities could be made without serious risk.

by need of cash reserve.

What proportion the reserve should bear to the liabilities which it is to protect is a question which the law has sometimes attempted to settle, by requiring a certain minimum,[1] leaving it to every individual bank to

The ratio of reserve to liabilities,

[1] The law of the United States, under which the national banks are established, recognizes twenty-five per cent. as the minimum reserve for city banks, and fifteen per cent. as the minimum for country banks. *Revised Statutes*, § 5191.

determine for itself how much may be required in addition to this minimum. And this is no doubt as far as any general rule can go. As has already been suggested, the requirements for safety of different banks and in different places must vary, and so must the requirements of the same bank at different times.[1] In fact, the question as to the proper amount of reserve never depends simply on the absolute ratio of the reserve to the liabilities, but always involves further questions as to the probable receipts of cash by the bank and probable demands upon it, in the near future. It can only be said that the reserve should be large enough, not only to insure the immediate payment of any probable demand from depositors, but also to secure the bank from being brought down to the "danger line" by any such demand. If twenty-five per cent. is the minimum consistent with safety, the reserve should be far enough above this to be secure from reduction to a point where any further demand or accident may make the situation hazardous.[2]

In the management of its reserve the bank itself necessarily feels a strong conflict of interests. On the one hand, it is impelled to increase its securities as far as possible, for it is from them that it derives its profits, and the retention of a large amount of idle cash is felt as a loss. On the other hand, the

[1] The Bank of England may be content with a reserve amounting to 33 per cent. of its deposits, as in October, 1885, or it may be uneasy with a reserve amounting to 44 per cent., as in September, 1890.

[2] For a discussion of this subject, see Bagehot's *Lombard Street*, chapter xii.

maintenance of a reserve sufficient, not only to enable the bank to continue its payments but to inspire the public with confidence in its ability to continue them, is a necessity of its existence, even though a part of its resources do thus appear to be kept permanently idle. As a natural consequence, the actual settlement of the question in favor of a large or of a small reserve in any particular case will depend in good measure on the temperament of the managers.

not fixed in practice by rule.

In every banking community may be found "conservative" banks, the caution of whose managers forbids them to take risks by extending their business at the expense of an ample reserve; and by their side may be seen the more "active" banks, whose managers habitually spread all possible sail, and provide for the storm only when it comes.

Good securities no substitute for cash reserve.

It is to be observed that the necessity of providing a cash reserve is not met by the excellence of the securities held by the bank. Although their certainty of payment at maturity be absolute, still the demands upon the bank are demands for cash, and cannot be answered by the offer of even the best securities. If the depositor or creditor does not receive cash in full for his demand when it is made, the bank has failed, and any satisfaction of his claim by the delivery of a security is, as it were, only the beginning of a division of the property of the bank among its creditors. Specie, therefore, or the paper which is a substitute for it as a legal tender for debt, forms the real banking reserve. The reserve of the bank may,

however, be greatly strengthened by the judicious selection of securities. For example, if, in the account above given, the "bonds and stocks" are, as they should be, of descriptions which are readily salable, they afford the means of replenishing the reserve in case of need, without foregoing the enjoyment of an income from this amount of resources for the present. In extreme cases of general financial panic, it is true, even the strongest government securities may find but few purchasers [1]; still such a provision is the best support which can be had in the absence of, or as an auxiliary to, a sufficient reserve of actual cash.

Reserve regulated by loaning more, or less.

The natural method of securing the proper apportionment of resources between securities and reserve, under ordinary circumstances, is by increasing or diminishing the loans, or, in other words, the purchases of securities made from day to day in the regular course of business. That part of the securities which consists of the promises of individuals or firms to pay to the bank at fixed dates, is made up of many such pieces of commercial paper, maturing, if properly marshalled, in tolerably steady succession. The payment of one of these engagements when it becomes due may be made either in money, or by the surrender to the bank of an equal amount of its own liabilities, as will be shown in the next chapter. In the former case, the payment of the maturing paper

[1] In the London market in the panic of May, 1866, there was a moment when even "consols were unsalable." Patterson, *Science of Finance*, p. 223.

to the bank is in fact the conversion of a security into cash, and increases the reserve without change in the liabilities; in the latter, the reduction of securities is balanced by a reduction of liabilities which raises the proportion of reserve. If, then, the bank stops its "discounts" or the investments in new securities, or if it even slackens its usual activity in making such investments, the regular succession of maturing paper will gradually strengthen its reserve; if it increases its activity in investment, it will lower or weaken its reserve; and if it adjusts the amount of its new investments to the regular stream of payments made by its debtors, it may keep the strength of its reserve unaltered, until some change in the condition of affairs brings cash to it or takes cash away by some other process.

This natural dependence of the reserve upon the more or less rapid re-investment of its resources by the bank is distinctly recognized by the law of the United States, which provides that when the reserve of any national bank falls below the legal minimum, such bank "shall not increase its liabilities by making any new loans or discounts," until its reserve has been restored to its required proportion.[1] By a less harsh application of the same principle, the Bank of England operates upon its reserve by lowering or raising its rate of discount, and thus encouraging or discouraging applications for loans. And it was with a view of facilitating the replenishment

This fact recognized by law and practice.

[1] *Revised Statutes of the United States*, § 5191.

of the reserve by the curtailment of loans, that the law of Louisiana formerly provided that the banks in New Orleans should hold what were called "short bills," or paper maturing within ninety days, to the amount of two thirds of their cash liabilities, so that the constant stream of payments of such paper might always insure to every bank the early command of a large part of its resources.[1]

To return, in conclusion, to the account given on p. 28; we have there among the liabilities certain sums classified as "surplus" and as "undivided profits." Taken together these sums represent the profits which have been made, but not divided among the stockholders, and which are therefore to be accounted for by the bank. The surplus is that portion of these profits which as a matter of policy it has been determined not to divide and pay over to the stockholders, but to retain in the business, as in fact, although not in name, an addition to the capital. The remaining portion, the undivided profits, is the fund from which, after payment of current expenses and of any losses which may occur, the next dividend to the stockholders will be made. The current expenses are for the present entered on the other side of the account, as they represent a certain amount of cash which has disappeared; but at the periodical settle-

Certain usual heads of accounts.

[1] See some remarks on the excellent effects of the Louisiana system by Samuel Hooper, *Theory and Effects of Laws Regulating Specie in Banks*, 1860. For the law itself, *Acts of the Third Legislature of Louisiana*, 1857, p. 104.

ment of accounts they must be deducted from the undivided profits, and will thus drop out from the statement. "Other assets," here set down as an investment, may be supposed to cover any form of property held by the bank and not otherwise classified, but especially the doubtful securities, or such property, not properly dealt in by a bank, as it may have been necessary to take and to hold temporarily, for the purpose of securing some debt not otherwise recoverable. For example, although the bank could not properly invest in a mortgage, it might be wise for it to accept a mortgage in settlement with an embarrassed debtor, and in this case the mortgage would stand among the "other assets." And, finally, "cash items" include such demands on individuals or other banks as are collectible in cash and can therefore fairly be deemed the equivalent of cash in hand. In the absence of any legal provision limiting the classification of such demands as reserve, they may be regarded as virtually a part of the reserve, which in the case before us may therefore be treated as made up of cash items, specie, and legal-tender notes.

To illustrate what has been said in this chapter we will now suppose the bank, with its affairs standing as on page 28, to make the following operations:

a. To add to its securities $20,000, by discount of three-months paper at six per cent., three fourths being purchased by the creation of liabilities, and one fourth by the expenditure of cash. The account would then stand as follows:

Liabilities.		*Resources.*	
Capital . . .	$100,000	Loans . . .	$325,000
Surplus . . .	29,000	Bonds and stocks	23,000
Undivided profits	10,300	Real estate . .	15,000
Deposits . .	319,775	Other assets .	20,000
		Expenses . .	1,000
		Reserve . .	75,075
	$459,075		$459,075

b. To retrace its steps by diminishing its "discounts" or holding of securities to the extent of $50,000, of which four fifths are paid to it by the surrender of demands for deposits to a like amount and one fifth in cash; to pay $1,250 for current expenses; and further to increase its reserve by the sale of bonds and stocks to the amount of $10,000. The following would then be the state of the account:

Liabilities.		*Resources.*	
Capital . . .	$100,000	Loans . . .	$275,000
Surplus . . .	29,000	Bonds and stocks	13,000
Undivided profits	10,300	Real estate . .	15,000
Deposits . .	279,775	Other assets .	20,000
		Expenses . .	2,250
		Reserve . . .	93,825
	$419,075		$419,075

c. To sell $2,000 of its other assets for cash with a loss of $500; to make a semi-annual dividend of four per cent., of which one half is credited to stockholders who happen to be depositors also, and one half is paid in cash; to sell $4,000 of bonds at a profit of fifteen per cent.; and to carry $1,000 of its undivided profits to surplus. The account would

then stand at the beginning of the new half year, as follows:

Liabilities.		*Resources.*	
Capital . . .	$100,000	Loans . . .	$275,000
Surplus . . .	30,000	Bonds and stocks	9,000
Undivided profits	3,150	Real estate . .	15,000
Deposits . . .	281,775	Other assets .	18,000
		Reserve . . .	97,925
	$414,925		$414,925

CHAPTER IV.

THE CHECK SYSTEM.

IN the preceding chapter reference has been made more than once to the transfer of deposits by one holder to another, and to their consequent use as currency. It is now necessary to examine more closely the simple machinery by which this transfer is effected. The depositor, or the creditor of a bank, who has to make a payment to some other person, has his choice between two methods of making it. He may demand money from the bank, in the exercise of his right as a creditor, and deliver this money; or, with the assent of the person to whom he has to make payment, he may give to this person an order on the bank for the money, or what is commonly called a check. If he adopts the latter method, a payment for goods or of a debt is effected by the simple transfer of a right to demand money from the bank; and so too if the recipient of the check gives it in payment to some third person, and he to a fourth, and so on. To this extent the check is plainly made a substitute for the sum of money for which it calls. It represents no particular money or group of coins, for, as we have seen, the deposit

Deposits used as currency.

Simplest case of payment by check.

is likely to have been created by the bank in exchange for some security bought by it, and is, therefore, a naked right to demand, and not a claim to any particular cash; and even if the deposit originated in the lodging of money by the depositor, it has in this case also become a naked right to demand and does not imply any claim to the money actually deposited. But the transfer of this naked right, in the case supposed, is made by the agreement of the parties to serve the same purpose as the transfer of money, and the right thus becomes a substitute for money.

The effectiveness of this substitution, however, is increased and the use of the deposit greatly prolonged, where it is the practice for the transferee himself to deposit the check, instead of demanding its payment by the bank, or seeking his opportunity to use it in some payment of his own.

If we suppose all the parties concerned to keep their accounts with a single bank, and suppose a check for $2,000 to have been drawn by A against his deposit in the bank and given by him to B in payment for goods, B may deposit this check to his own credit as he would money. The bank then makes the necessary changes in its accounts, cancels its liability for $2,000 to A and recognizes a liability for a like amount to B, and the transfer of the right by A to B is thus made complete. This novation, or change of creditors, to which the bank has made itself a party, has not only secured B against the possibility of finding A's deposit in the bank exhausted by other checks drawn by A fraudulently or

by mistake, but it has also made B's right of demand against the bank divisible at pleasure, since this, instead of a right to demand a determinate sum, has now become a right to draw his own check or checks to an amount not exceeding $2,000 in all. In this way checks become the instruments by which rights to demand money may be transferred from one individual to another in such amounts as the transactions between them may require; and when we consider the great security and convenience of transfer by such means as compared with actual payment in money, there is little need of further explanation of the astonishing extent to which checks are now used, especially in English-speaking communities.[1]

If, now, we suppose the parties concerned to keep their accounts with different banks in the same city, we shall have results somewhat more complex but not different in kind. In this case we may suppose the check drawn by A upon Bank No. 1 to be deposited by B in Bank No. 2. If the transaction stands alone, the latter bank collects the money called for by the check, and holds itself liable to make payment to B on demand in sums to suit his pleasure. This makes a change, not only of creditors, but of debtors, and yet at the close,

Complex case, where banks are numerous.

[1] In July, 1890, the deposit accounts in the banks of the United States and United Kingdom, excluding those with private bankers, were nearly as follows:

United States, national banks	$1,552,000,000
" " State " (estimated) . .	525,000,000
United Kingdom, joint-stock banks . . .	3,000,000,000
" " Bank of England . . .	165,000,000

after the payment by A to B has been completed, we have in existence a bank liability of the same amount as that with which we started. Probably, however, in a community where there were several banks, the transaction would not stand alone. At the end of a day's business every bank would be likely to have received in deposit checks upon several, and perhaps all, of the others; each would then have checks to meet as well as checks to collect; and each would naturally make its settlement with every other, not by making mutual demands and mutual payments, but by the offsetting of demands and the payment only of such balance as might then remain due from one or the other. Thus, if at the end of the day Bank No. 1 had received in deposit checks upon Bank No. 2, to the amount of $25,000, and Bank No. 2, in like manner, checks upon Bank No. 1 amounting to $23,000, the account as between the banks would be settled easily by the payment of $2,000 by Bank No. 2 to Bank No. 1. And the result is the same if the operation here traced is multiplied by the number of banks carrying on business with each other in a great city. The settlement of accounts by the banks with each other, however, still leaves the banks collectively under the same liability for payment on demand as before. The liability rests upon the banks, it may be, in different proportions, and is differently distributed among the creditors: but so long as payments are made by checks and checks deposited, the right to demand from a bank which is called a deposit continues to exist in somebody's possession, and is as well fitted to dis-

charge the office of money as when it was first created.[1]

The system perfected by Clearing Houses,

This medium of payment acquires great perfection wherever the Clearing-House system is adopted. Under this system there is a daily meeting of clerks representing all the banks carrying on business at any common centre. Every bank there turns in at a central office all the checks and cash demands which it holds against others and is credited therewith, and is also charged with all checks and demands brought against it in like manner by others. The checks and demands which have thus been credited to and charged against each bank are then summed up, and the balance found to be owed by or due to each bank, as the case may be, it then pays to or receives from the central office in money. By this means a great mass of transactions, which would otherwise require a series of demands by each bank upon every other, are settled at once, and the transportation of large sums in cash from one bank to another is to a great extent dispensed with.[2]

[1] A statement of the working of the check system, under circumstances of different degrees of complexity, is given by Jevons, *Money and the Mechanism of Exchange*, pp. 252–257.

[2] For a further notice of the Clearing-House system, see *note* on p. 52. The transportation of cash referred to in the text is reduced to its minimum by the practice sometimes adopted of using "Clearing-House certificates" instead of money or legal-tender notes. These certificates represent money or notes deposited with the Clearing House, or with some bank which is its representative for this purpose, and are payable on demand; being made in convenient denominations they are used in payments between the banks, and for the purposes of reserve are recognized by the law of the United States as the

Under this arrangement the bank deposit, circulated by means of checks, becomes the most convenient means of payment yet devised. A stroke of the pen transfers it in whatever amount is needed for the largest transaction, and this transfer instantly becomes the basis for fresh operations, with as complete security against accidental loss as can be imagined. In the strict economic sense this medium, no doubt, has rapidity of circulation in a high degree, while in the sense of actual activity of movement in a given time it far outstrips money or notes, and has been well said to be the most volatile of all the mediums of exchange. Of the entire circulating medium of this country it forms incomparably the greatest, although the least considered, part. Depending for its efficiency solely upon convention and issued as well by private firms as by incorporated banks,[1] it for the most part eludes the regulations which legislatures so industriously enforce upon the other constituents of the currency. Indeed, beyond the requirement of a minimum reserve to be held by incorporated banks, made by the law of the United States, we may say that the subject is not touched by legisla-

and deposits made the chief medium of payment.

equivalent of the cash which they represent. *Revised Statutes*, § 5192. The same object is secured in London, where banks and bankers keep their cash balances at the Bank of England, by transfers at that Bank.

[1] Of the twenty-seven members of the London Clearing House, twelve are private banking houses. "The joint-stock banks were not admitted until 1854, nor the Bank of England until ten years later." Gilbart, *Principles and Practice of Banking*, (edition of 1873), 452.

tion, in this country or elsewhere. The necessity for payment in specie upon demand, which is the most important safeguard of value, is the result of the general provision for the payment of debts of any kind. And the chief assurance against excessive expansion on the part of any single establishment is given by the certain demand for prompt and frequent settlement, occasioned by the voluntary establishment of the Clearing House, or by the habits of the community, but not by law.

What natural limit is to be found then to the continued circulation of a liability for deposit when once it is created and set in motion by the process of "discount"?

Plainly, if at any stage the holder of a check, instead of depositing it, demands its payment in money by the bank on which it is drawn, the payment extinguishes the liability to that extent. It is quite possible that the money, after a brief circulation, may find its way back, in fresh deposits of cash made by one or more individuals, and so a new liability similar to the old one may come into existence; but, nevertheless, we may fairly say that the use of the original deposit as a substitute for money came to a natural close with the payment of the check. Except, however, in the cases where money is required for some special purpose, as to be sent abroad or to some other part of the country, or for the increase of the stock in the hands of the public, this limit to the circulation of deposits is not of great importance. For, as the withdrawal of specie under ordinary circumstances is merely the exchange of

one medium of payment for another, any withdrawal on a large scale would imply such a change in the habits and preferences of the public as is not often or easily made.

A more important limit is found, however, in the use of deposits for the payment of debts due to the bank. That the depositor can, to the extent of his deposit, pay a debt due from himself to the bank by the relinquishment of the bank's debt to him, needs no explanation. In practice he draws his own check in favor of the bank and exchanges it for the obligation held against him by the bank, this mutual release being for each side as effectual a discharge of liability as a payment in money could have been. Such a payment of the debt due by the depositor, and previously standing among the securities or loans of the bank, finally cancels a liability of the bank, equal in amount to that which was created when the loan was made.[1] It matters little by what process the deposit, or right of demand, finally used by the depositor in payment came into his possession. If he is a merchant, he has probably collected smaller sums which were due to him, for the purpose of his payment to the bank, and these smaller sums are likely to have come to his hands to a great extent in the shape of checks, which, as we have seen, were the instruments for transferring to him the rights of demand which others held against the bank. If he borrowed the means of payment, he in all probability received the amount in a check. Nor is the case

Deposits cancelled by payments to the bank.

[1] Compare the statement of account for operation *b.* on p. 37.

different when there are several banks, and the depositor has received his collections in checks drawn upon other banks than his own. As was seen when we were considering this method of payment on page 41, the deposit of these checks to his credit effects a transfer of the liability from the other banks to his own; and here also this liability is finally extinguished when he uses it in payment of his debt to the bank.

It is possible, indeed, that the payment should be made by the debtor to the bank in money, or by a check drawn against a fresh deposit of money, and in this case either there is no extinguishment of bank liability by the payment, or only the new liability created by the fresh deposit is extinguished. But in a community where banking is firmly and widely established, the great payments of commerce and of general business are certain to be made, for the most part, in the medium which is most accessible and most convenient for use in large sums, and this medium is undoubtedly that which is commonly termed bank deposits.[1]

[1] It has been found by inquiry that in New York, at two different dates in 1881, 98.7 per cent. of the total receipts of the banks were in checks and similar instruments calling for cash at sight. In the United States as a whole the proportion was 94.6 per cent. See *Comptroller's Report* for 1881, pp. 13–23. Another important investigation of the same kind was made by the Comptroller at two corresponding dates in 1890, with the remarkable result that in New York the proportion of checks and drafts was found to be 96 and 95.6 per cent., and in the United States as a whole 92.5 and 91 per cent. In London the proportion was stated several years ago to be 97.2 per cent. *Comptroller's Report* for 1890, pp. 22–32.

Hence a correspondence of loans and deposits.

It appears then that deposits are created by the act of the bank, when loans are increased, and that they are cancelled when loans are paid.[1] There is, therefore, a rough correspondence between the movements of loans and of deposits. This correspondence may be weakened by the actual flow of money to or from the bank, but in the ordinary movements of business it is tolerably close, and where it fails the apparent exception will be found to be explained by some special condition of the case.[2] It will be found in general that, at times when banks are increasing their operations, their deposits swell, and that when they are contracting, their deposits fall. The true connection between these movements is often forgotten, but its nature cannot be mistaken by anybody who will observe the steps by which an ordinary "discount" is placed at the command of the borrower.

[1] For some striking remarks on this subject, see Hamilton's report on a National Bank, *Works* (Lodge's edition), iii., 128. See also *Quarterly Journal of Economics*, i., 403.

[2] The weekly statements of the New York banks for November, 1890, are a good illustration of the movement of loans and deposits, at a period of great financial disturbance, when there was a heavy contraction of loans and some serious withdrawals of cash. The aggregates, stated in millions, are as follows:

	Loans.	*Deposits.*	*Specie and Legal Tender.*
November 1	$399.8	$396.3	$99.8
" 8	398.9	392.2	95.5
" 15	393.3	386.6	95.8
" 22	387.3	381.7	95.5
" 29	384.6	378.6	95.

For the special conditions affecting the banks during these weeks, see the *Commercial and Financial Chronicle, passim.*

It has already been suggested that the use of deposits and checks is most highly developed among the English-speaking peoples. That the scattered branches of the English race should in this respect have followed the example of the mother country is not surprising; but the reasons for the difference in practice between England and the Continent are not so clear.[1] The difference itself, however, is strongly marked. The American or Englishman who is in the habit of receiving and making frequent payments avoids the keeping of cash in hand, deposits his receipts, and pays all except the smallest sums by checks. As a consequence, the establishment of a bank is an early symptom of the growth of trade in a small community of English blood. But even in large cities the French or German trader finds it most natural to keep his own strong box; even large establishments adopt but slowly the practice of depositing. And in Italy, where banks of deposit flourished long before their introduction into England, they are sparingly used and make their way with some difficulty against the more recent national habit. In these cases the silent choice of custom, which leads one people to prefer coin and another notes and a

Use of deposits affected by national habit,

[1] Mr. Bagehot plausibly conjectures that the immunity of England from foreign invasion and domestic revolution has made the growth of confidence possible, to a degree not permitted by the disturbed condition of the Continent for generations past. *Lombard Street*, p. 90. But this explanation appears unsatisfactory, in view of the frequently robust faith of Continental traders and speculators, and of the ease with which English-speaking peoples establish deposit banks under the most untoward circumstances.

third to prefer a mixed currency, also leads to the personal custody and direct delivery of cash. The effect is to be seen, not only in the distribution of banking institutions, as to which the difference between the countries named is extreme, but also in the proportion which the deposits of the great banks in those countries respectively bear to their loans or private securities.[1] Upon the Continent there is also a preference for holding the engagement of the bank in the form of a note, rather than in that of a deposit, but in England or America, if the note is used for any thing beyond the small purchases of every-day life, it is usually from necessity rather than choice.

and by local conditions.

Peculiarities of national character are not the only conditions, however, which affect the use of deposits as currency in a given country. The extended use of a deposit and check system necessarily implies convenient access to banks and also a certain extended scale of operations. *Ceteris paribus*, then, the system will naturally be stronger where population is dense or communication easy,

[1] The published accounts of several great banks, at nearly the same time in October, 1890, afford the following comparative statement, the several currencies being reduced to dollars, at the rate of £1 or 25 francs for $5, and the amounts given in millions and tenths of millions:

	Loans.	*Deposits.*	*Notes.*
Bank of England	$130.5	$145.	$127.
" " France	183.7	70.2	604.4
" " Belgium	63.1	13.2	74.4
" " Netherlands	52.5	9.5	86.5
Reichsbank of Germany	195.1	78.7	282.9
Austro-Hungarian Bank	115.5		226.8
Banks of New York	401.	413.	3.5

than in a sparsely settled country or where intercourse is difficult; manufactures, commerce, and general trade will afford it a better field than agriculture; and, comparing one period with another, its development in a country with increasing population and capital and with diversified pursuits will be progressive and rapid. Accordingly we find that in the United States the city banks have extended the deposit system much farther than the country banks[1]; that in 1890 the system is developed much farther than in 1875; and that, to compare the banking of half a century ago with that of to-day, the United States Bank at the height of its prosperity was in this respect in as marked contrast with the national banks of to-day, as are the banks on the continent of Europe.[2] The full extent to which this development has now gone is seen, not in the mere

[1] The reports of the national banks for July, 1875 and 1890, show the comparative standing of the "reserve city" banks and of the country banks to have been approximately as follows, representing capital and surplus in each case by 100:

	City.		*Country.*	
	1875.	*1890.*	*1875.*	*1890.*
Capital	100	100	100	100
Loans	187	275	130	199
Individual deposits	144	215	77	158
Notes	34	6	60	19

[2] A comparison of the second United States Bank, at its greatest expansion in 1832, with the average condition of all the national banks in July, 1890, taking the proportions for an equal amount of capital, shows the following contrast:

	1832.	*1890.*
Capital	35 millions.	35 millions.
Loans	70 "	104 "
Individual deposits	9 "	82 "
Notes	26 "	7 "

amount to which bank deposits have risen on the average, but in the vast aggregate of transactions effected by this rapidly circulating medium, as shown in the reports of the Clearing House. These reports contain the record of a mass of business, inconceivable in its amount and complexity, such as, it is certain, could not have come into existence without the aid of this powerful agent.

NOTE.

To illustrate the working of the Clearing-House system, we will suppose the case of six banks carrying on business in the same town. On a given morning we will suppose the messengers of these banks to meet at the Clearing House, each bringing the checks received by his bank in deposit on the previous day, as follows:

No. 1, checks on	No.	2,	$6,500	No. 4, checks on	No.	1,	$8,750
" " "	"	3,	9,200	" " "	"	2,	4,700
" " "	"	4,	7,100	" " "	"	3,	6,740
" " "	"	5,	6,250	" " "	"	5,	5,820
" " "	"	6,	4,500	" " "	"	6,	5,140
			$33,550				$31,150
No. 2, checks on	No.	1,	$7,800	No. 5, checks on	No.	1,	$8,740
" " "	"	3,	4,100	" " "	"	2,	4,620
" " "	"	4,	5,760	" " "	"	3,	9,250
" " "	"	5,	6,340	" " "	"	4,	7,680
" " "	"	6,	5,870	" " "	"	6,	5,940
			$29,870				$36,230
No. 3 checks on	No.	1,	$6,750	No. 6, checks on	No.	1,	$3,700
" " "	"	2,	4,270	" " "	"	2,	4,100
" " "	"	4,	5,900	" " "	"	3,	6,740
" " "	"	5,	6,400	" " "	"	4,	9,250
" " "	"	6,	5,940	" " "	"	5,	7,850
			$29,260				$31,640

The sum of all the checks brought in is $191,700. If, now, we credit each bank with the checks which it presents against the others, and charge it with the checks presented by them against it, we shall

find that No. 1 is charged with $35,740 and credited with $33,550, that No. 2 is charged with $24,190 and credited with $29,870, and so for the others, and, therefore, that,

No. 1 owes a balance of	$2,190	
No. 2 *is owed* " "		$5,680
No. 3 owes " "	6,770	
No. 4 owes " "	4,540	
No. 5 *is owed* " "		3,570
No. 6 *is owed* " "		4,250
	$13,500	$13,500

If, then, the debtor banks, Nos. 1, 3, and 4, pay into the Clearing House the sums due from them amounting to $13,500, and the Clearing House pays out to the creditor banks, Nos. 2, 5, and 6, the sums due to them, of like amount, the result will be that every bank will, in effect, have collected payment of all the checks which it had received, and will have made payment of all the checks drawn against it. This settlement of checks amounting in all to $191,700 will have been made by the payment of $13,500, and transactions apparently involving thirty separate demands, each bank being the creditor of five others, will have been settled by a series of additions made at a central office, followed by three payments to and three payments from a common fund.

An account of the transactions of the New York Clearing House, one of the two largest in existence, is given in the *Comptroller's Report* for 1890, p. 69. In 1884 that Clearing House settled the balances of sixty-one banks, and of the Assistant Treasurer of the United States. In 1881, the year of largest business, the average daily exchanges were $159,232,191, the transactions on some days approaching $300,000,000; and these exchanges were settled by the payment of balances averaging daily only $5,823,010. Since the foundation of the establishment in 1853, the balances actually paid have amounted on the average to only 4.4 per cent. of the exchanges effected. For the details of the process of clearing, see Bolles, *Practical Banking*, for the clearing houses of the United States; and Gilbart, *Principles and Practice of Banking*, for the London Clearing House. For the present wide extension of the system in this country and elsewhere, see a pamphlet by D. P. Bailey, *The Clearing-House System*, reprinted from the *Banker's Magazine* (New York), 1890; also Raucbberg, *Der Clearing und Giro-Verkehr*.

CHAPTER V.

BANK-NOTES.

IT has already been said that the notes of a bank are a liability distinguishable in form, but not in substance, from its deposits. The creditor of a bank of issue has his choice between taking the evidence of his right in the form of a note, and taking it in the form of an entry in the books. For his use one form may be preferable to the other; if he desires to make payments in small sums, as for wages, he may prefer to take notes; if he is to make large payments, or expects a little delay in the use of his funds, he is quite certain to prefer being credited with a deposit. But, whatever his choice, the liability of the bank to make payment in money on demand is the same, and it is under the same necessity of providing itself with a reserve, sufficient to meet any demand which experience shows to be probable. To illustrate this part of the subject we will take the account given on page 38, and suppose the depositors to have drawn one third of their deposits in notes of the bank, which have thus been thrown into circulation:

Practical identity of deposits and notes,

Liabilities.		*Resources.*	
Capital . . .	$100,000	Loans . . .	$275,000
Surplus . . .	30,000	Bonds and stocks	9,000
Undivided profits	3,150	Real estate . .	15,000
Notes . . .	93,925	Other assets . .	18,000
Deposits . . .	187,850	Reserve . . .	97,925
	$414,925		$414,925

It is obvious from inspection that if any demand upon the bank weakens its reserve, it makes no difference whether the demand is from depositors or noteholders; the security of the remaining liabilities, of whatever kind, is impaired to the same degree in either case, and the same precautionary measures for replenishment will have to be taken. And so, if fresh loans are made, the relation of reserve to demand liabilities is altered, whether the loans are effected by an increase of deposits or of notes. The law does not always recognize this close similarity of the two kinds of liability. It has sometimes required a reserve for the protection of notes alone, under the apparent impression that this must secure the solvency of the bank, and it sometimes makes a provision for a reserve of different amount for the notes, as in the national-bank system of the United States, having in view the different degrees of the probable demand for payment of notes and of deposits respectively.[1] Apart, however, from considerations like

not always recognized by law.

[1] The national banks are now required, by the Act of 1874, to have a reserve of only five per cent. for the protection of their notes, which is held by the Treasury as the central redeeming agency. 18 *Statutes at Large*, 123. The bonds deposited to secure the circulation against insolvency, it is to be noticed, are in no sense a reserve, and are not so described by the law.

the last, the two forms of liability seem to stand upon the same footing. The bank itself finds the same advantage in the one as in the other. Its profit is made from the securities which it holds, and whatever profit it makes beyond the mere interest on the investment of its capital, results from the holding of securities purchased by means of its credit; but the rate of this profit is in no way dependent upon the process by which that credit is transferred from one creditor to another.

The bank, in short, is interested simply in providing that form of credit which is most convenient for the use of the community on which it depends, for it is by that means that it can do the greatest amount of business and hold the greatest amount of securities. Hence we see a remarkable difference in the issues of city and of country banks, carried on under the same system and with the same privileges.[1] The deposit, transferred by check, is more convenient for large transactions than the note, being more expeditious and safer[2]; it is in the cities that trans-

[1] See p. 51, *note*. A striking illustration of the same point is to be found in the condition of the national banks of New York City, compared with those of Massachusetts, outside of Boston, the amounts of capital being nearly the same. The figures, here given only in millions, are for September 30, 1884, when the circulation of bank notes was still large, although no longer at its highest point. See *Comptroller's Report*, 1884.

	New York.	*Massachusetts.*
Capital	$46.2	$45.7
Loans and securities	239.	128.6
Notes	13.2	35.8
Individual deposits	184.6	45.4

[2] The safety of the deposit is due to the fact that the check, being usually payable "to order," especially when the amount is considera-

actions occur on the largest scale, as well as in the largest number; and it is in the cities, therefore, that the strongest need is felt of the medium of exchange best adapted for the transfer of great sums. It is in the cities, moreover, that the condition of convenient access to banks, needed for the full development of the deposit and check system, is satisfied in its highest degree. City banks, therefore, on the whole, use their right of circulating notes but sparingly as compared with country banks, and sometimes prefer to forego its use altogether, while their deposits attain an enormous expansion. Country banks, on the other hand, dealing on a smaller scale and in communities which have more need of a medium transferable without recourse to the bank, find the expansion of their deposits much restricted in comparison with the circulation of their notes. It is for the same reason that, as time goes on, the relative importance of the bank-note tends generally to diminish in comparison with that of deposits. The swift development of modern commerce is expanding in high proportion the field for the most convenient and efficient medium, while the transactions in which notes find their use are growing in slower ratio. It becomes more and more the business of banks, therefore, to extend the use of their credit

Difference between city issues and country.

ble, cannot be drawn or credited to its holder unless endorsed by the payee. If lost or stolen, therefore, it cannot be paid unless the bank is deceived by a forged endorsement, in which case the loss falls upon the bank itself. Bank-notes, however, being payable to bearer, are nearly as difficult to trace as money.

in the form of deposits, the increase in their issue of notes being, in the most progressive communities, no longer a matter of great concern.[1]

Note-holders protected by law, but not depositors.

That governments have so frequently felt it their duty to take measures for the protection of the holders of bank-notes against the insolvency of the bank, but have so seldom legislated for the protection of depositors, is probably due to several reasons. Legislators have generally failed to perceive the similarity of the two kinds of liability, and the claim for equal consideration which can be made, with some show of reason, on behalf of depositors. Moreover, the appropriate measures for the protection of the note-holders are more obvious and of easier application; and it is doubtless true also that depositors, as a class, are better informed and can more easily protect themselves, and so have less claim upon the sympathy and guardianship of the legislature. At all events, provision for the safety of notes is not infrequently made by law, and when made is apt to consist either of the easily understood requirement of a certain reserve of cash for the payment of the notes, or of a preferred claim to some portion of the assets, allowed to the holders of notes in case a bank becomes insolvent.

The effect of provisions for giving holders of notes a preferred claim may be illustrated easily, if we

[1] Compare the condition of the State banks from 1834 to 1863 with that of the national banks in recent years. *Comptroller's Report*, 1876, p. 94. See especially the remarkable development of the New York banks during the former period. *Ibid.*, p. 102.

take the statement of account last given, and, without any change of liabilities, suppose the bank to have been led to make a change of investments and to diminish its other assets and its reserve, until its affairs stand as follows:

Liabilities.		*Resources.*	
Capital . .	$100,000	Loans . . .	$217,000
Surplus . . .	30,000	Bonds and stocks.	105,000
Undivided profits	3,150	Real estate . .	15,000
Deposits . . .	187,850	Other assets . .	4,000
Notes	93,925	Reserve	73,925
	$414,925		$414,925

The liabilities of the bank are plainly of two classes: the liability to stockholders for capital, surplus and undivided profits, and the liability to general creditors for deposits and notes. If the affairs of the bank were to be wound up, by reason of losses, or for any other reason, it is clear that, in case of any deficiency of resources, the general creditors should be paid first in full, and that only the residue after such payment can be said to be the property of the stockholders and divisible among them. If, for example, it proved that, by reason of failures and losses, the loans, bonds, real estate, and other assets, instead of being worth $341,000, which was their original value, were worth only $225,000, we should then have a total of resources amounting to $298,925, leaving, after the payment of deposits and notes, only $17,150 to be divided among the stockholders, the disaster having swept away their supposed surplus, and more than four fifths of their capital. We may go farther and suppose the

Effect of losses illustrated.

depreciation to have reduced the value of the total resources to $250,000, in which case the creditors must be satisfied with a dividend of a fraction more than 92 per cent.[1] and the stockholders are seen to have lost all that they had embarked in the business.

In these cases the depositors, holders of notes and other outside creditors, all, in short, who can properly be regarded as creditors in the settlement, stand upon the same footing, one with another, and have similar rights, no one class among them having any preference unless by virtue of some special legislative provision. We may now suppose that the legislature, for the protection of the holders of notes, has given them a right to be paid in full in preference to other creditors, if the assets of a bank in liquidation should fall short.[2] Upon this supposition, from the total resources amounting to $250,000, we should first have the notes paid in full, amounting to $93,925; and then the remaining $156,075 would be divided among the depositors, giving them a dividend of a little more than 83 per cent.

A provision of law, then, giving the holders of notes a preferred claim to the assets of the bank would be a natural and easy method of insuring this class of creditors, except in case of a very large issue or a very bad failure. But we may suppose the legisla-

[1] If we suppose the law to make the stockholders liable as individuals for the debts of the bank, they would under these circumstances be subject to an assessment, in order to make full payment to the depositors and note-holders. For the liability of stock-holders under the national-bank system of the United States, see *Revised Statutes*, § 5151.

[2] *E. g.*, see New Hampshire *Compiled Statutes of 1853*, ch. 148, § 30.

ture to wish to go farther than this and to give the note-holders, not a general claim in preference to others, but a claim to specific property of the bank, supposed to be of solid value and sufficient to insure payment of the notes in any case. Thus, to return to the account on page 59, it appears that the bank holds bonds and stocks to the amount of $105,000 as a part of its securities. Suppose, then, that the law requires the bank to hold these bonds and stocks pledged to secure the ultimate payment of its $93,925 of notes. Under such an arrangement, the securities would not cease to be the property of the bank, and the earnings of the securities would remain, as before, a part of the profits of the bank. The pledged property would be enjoyed, however, subject to the provision that, in case of the failure of the bank, the proceeds of the securities should be applied first to the payment of the outstanding notes. If the law should go farther and provide that only certain approved classes of securities should be used for this purpose, and that the securities pledged should be lodged for safe-keeping in the hands of some public officer, the substance of the transaction would still be unchanged. It would still remain a simple case of the specific appropriation of a certain part of the property of the bank to the payment of a particular class of its liabilities in a given contingency. The essential structure of the bank would be unchanged and the sources of its profits would be neither more nor fewer than they were in the absence of this pledge of securities.

How notes are secured by pledge of property,

The method described in this supposed case, of protecting the issue of notes by a deposit of securities in the hands of some public officer, is that which was adopted by the State of New York in 1838, and was long known as the "free-banking" system. Many other States followed the example of New York, and finally in 1863 the New York plan was adopted by Congress as the basis for the national-banking system.[1]

as in the national banks of the United States,

If, now, we vary the above supposition so far as to imagine the property pledged for the protection of the notes to consist, not wholly of securities, but of securities to a certain amount and of specie for all notes issued in excess thereof, we shall have in substance the provision made by law in 1844 for the protection of the notes of the Bank of England.

and the Bank of England.

Besides other reasons, already adverted to, for seeking legislative protection for bank-notes, the belief has been common that banks are under a special and dangerous temptation to over-issue notes, thus causing their depreciation with loss to the public. The question whether really convertible notes *can* be issued in excess has been the subject of much wearisome and futile discussion,[2] tending to secure for the notes far more than their proper share of attention. It has already been shown, however, that the question whether notes shall be issued or not, is

[1] For an account of the New York system and its adoption by other States, see *Comptroller's Report* for 1876, pp. 23–36.

[2] For convenient citations on this subject, see Walker on *Money*, ch. xix.

one which in modern banking is not settled affirmatively by the bank, but is settled by the creditor, who determines for himself and with an eye to his own convenience, whether to hold his right, as against the bank, in the form of a note or of a deposit. If he and creditors generally prefer the latter, the bank cannot force its notes into circulation. The really serious question would be whether the bank can extend the use of its credit, by deposits as well as by notes, in excess. This is as much as to ask whether the bank can go too far in the purchase of securities, or in other words, can unduly stimulate borrowers, the making of loans being the purpose for which the bank extends its credit. But this question cannot be answered without qualification. If we observe any period of ten years, we shall find some years in which banks have found the public depressed and spiritless, to such a degree that, with every motive for increasing their business, it has been impossible to find sound commercial paper in sufficient amount. So far from being able to extend their credit in excess, banks have at such times often reduced their capital because employment for it could not be found. Other years we shall find in which the public spirit was buoyant and adventurous, and in which the banks have fostered and increased the general tendency to speculation, by the facility with which they have given the use of their credit. It is true then that banks cannot extend their liabilities of either sort except in response to a demand from the public; it is also true that in certain

Whether banks can extend credit in excess.

states of business this demand may be unduly stimulated by their action, and that issues made in response to an unhealthy demand are in excess of the proper needs of the community. In any such expansion of bank credit, however, bank-notes must generally play the least important part.[1]

Far more important, probably, is the part played by what is known as the certified check. The check in its common form, under which it has been considered in this discussion, is simply an order of payment addressed by a depositor to the bank, and does not bear upon its face any engagement by the latter to pay. The bank is necessarily under the liability to pay to the depositor to the extent to which he has funds standing to his credit, but the check drawn by him is no part of the evidence of such liability. If, however, the proper officer of the bank certifies upon the check that it is good for the amount called for by it, the check then becomes an obligation of the bank, the certification is in effect the bank's promise to pay, and the whole transaction becomes indistinguishable in principle from the issue of a bank-note. The certification of the check necessarily implies that the drawer has funds in the bank to the amount called

Certified checks and their abuse.

[1] The condition of the national banks in December, 1878, was one of great depression, and may be compared with their expanded state in October, 1890, the amounts being given in millions.

	December 6, 1878.	*October* 2, 1890.
Capital and surplus	$581.3	$864.
Loans	826.	1,986.
Deposits	598.8	1,564.8
Notes	303.3	122.9

for and that they are appropriated for the payment of the check when it shall be presented; and in this form the certified check is safe and convenient for many purposes. It is obviously easy, however, to certify the check as good, when the funds to meet it are deficient or are merely expected, or for the purpose of giving the check credit for some temporary use, looking to its ultimate cancellation without actual payment. In such cases the certified check is made the means of extending the use of its credit by the bank, in a manner peculiarly liable to abuse; and it has often proved itself to be a much more efficient instrument for promoting hazardous speculation than any issue of bank-notes likely to take place under modern conditions.[1]

Of other actual or possible forms which the evidence of the bank's liability may assume, it is enough to mention here what is known as the post-note. This is a bank-note payable not on demand but at some future time, probably not far distant. If much resorted to, the issuing of such notes would indicate that the bank was borrowing upon time, and was probably extending its business beyond safe limits. It is true that the Bank of England makes a small issue of post-notes, under the title of "seven-day"

[1] This subject is discussed among others in a valuable report drawn up by Mr. Geo. S. Coe and presented to the New York Clearing-House Association, November 11, 1873. *Commercial and Financial Chronicle*, November 15, 1873, p. 651. See the *Comptroller's Report* for 1884, p. 44, for the connection of certified checks with the crisis of that year in New York. The national banks are forbidden to certify checks unless the funds are actually in hand. 15 *Statutes at Large*, 335; 22 *ibid.*, 166.

bills, established as being safer for transmission by mail than the ordinary bank-notes.[1] In this country, however, the post-note has been found to present peculiar temptations for unsound banking, and its use by the national banks is therefore prohibited,[2] the law adopting the conservative policy of requiring that the liabilities of the bank, representing its use of credit for the extension of its investments, shall be cash liabilities, and not engagements to pay in the future.

NOTE.

Of the writers on banking, McLeod, *Theory and Practice of Banking*, has made the most careful analysis of the exchange which underlies every banking operation. Notwithstanding eccentricities of method and style, his exposition of the real meaning of "loans" and the ambiguities incident to our use of that term, the origin and purport of bank liabilities, and the substantial identity of the liabilities for deposits and notes, is clear and important, and might be cited in confirmation at many points in these pages. Reference may also be made with advantage to McLeod's smaller work, *Elements of Banking*.

Among earlier discussions, attention is specially called to a striking letter by James Pennington, in Tooke's *History of Prices*, ii., p. 369, in which the strong analogy between the deposit accounts of the London private bankers and the notes of the country bankers is forcibly stated and explained.

[1] Gilbart, *Principles and Practice of Banking*, p. 30.

[2] *Revised Statutes*, § 5183.

CHAPTER VI.

COMBINED RESERVES.

IT has been pointed out in a preceding chapter, that in the management of its reserve a bank feels a strong conflict of interests. It is impelled to increase its securities and to avoid the keeping of idle cash, by the desire for profit; it must also maintain a reserve strong enough to insure it from risk, in order to secure the confidence of the community. In a period of financial disturbance or crisis this conflict of interests is intensified, for the instinct of self-preservation may then demand the contraction of loans for the replenishment of the reserve, when a more far-seeing judgment would advise its apparent sacrifice by a liberal increase of accommodation. In a community where there is only one bank, or where there is a single bank of great influence, this difficulty of choice between opposing counsels is felt, and the action taken has therefore often been vacillating, mistaken, or tardy, with plainly mischievous consequences.[1]

[1] See, for example, Bagehot's strictures on the conduct of the Bank of England, *Lombard Street*, pp. 178, 199: "A more miserable catalogue than that of the failures of the Bank of England to keep a good banking reserve in all the seasons of trouble between 1825 and 1857, is scarcely to be found in history."

When, however, there are several banks side by side, without any recognized leader or strong combination, the difficulties of the case are greatly increased, for then the opposing interests of different banks also come into play. It is then possible, and in any sharp crisis is even probable, that some of the bank managers may decide to take care of themselves by reducing their loans and filling up their reserves, and leave it to others to take care of the general welfare by enlarging discounts and satisfying the public demands. The knowledge that some may pursue a selfish course weakens the disposition of others to take a more liberal course, and thus may practically lead the whole group of banks to pursue a policy of contraction, which is condemned by the judgment of the majority.

When banks not united, a crisis often intensified.

It is this difficulty of managing many reserves upon a common plan during a period of financial crisis, that has led on several occasions to the adoption of an expedient for combining the reserves of the banks of New York and of one or two other cities. The first occasion on which this was done was at the height of the frightful crisis of November, 1860, when the sudden development of the secession movement had destroyed a great body of mercantile credit, and had for a time paralyzed the industries of the whole country. The fifty banks of New York were at this moment endeavoring each to save itself, and the mercantile community, with the prospect of being called upon for the repayment of loans at a time when goods could not be

Panic of Nov., 1860, in New York.

sold, was in a condition of panic. Foreign exchange had become nearly unsalable,[1] and the efforts of a few banks to start the wheels of domestic commerce again, by buying bills drawn against shipments of produce, had resulted in failure.[2] It was necessary in some way to satisfy the alarmed community that every solvent debtor could rely upon having the usual facilities for paying or for renewing any liabilities maturing in the near future, and that he could safely shape his dealings upon that calculation. If this were not done, increased alarm, the withdrawal of deposits, hoarding of specie, and forced suspension of the banks themselves were certain to follow. And it could not be done, except by such an agreement among the banks as should insure the full co-operation of all.

The New York banks held in the aggregate, at this frightful juncture, an amount of specie which was equal to about twenty-three per cent. of their cash liabilities. This was a scanty reserve, but in the opinion of the more sagacious managers it was large enough to tide over the present crisis, if no further shock to credit occurred, and if the reserve were treated as a genuine reserve, to be used in pressing necessity, and not simply to be guarded. A liberal increase of loans and at the same time of liabilities would make it still more scanty, but nevertheless the

[1] Bankers' bills on London were quoted at the equivalent of $4.67 for the pound sterling, and commercial bills at $4.44, on November 19th, with few buyers.

[2] Besides the daily papers for November, see the review of the money market in the *Banker's Magazine*, 1860–61, pp. 499, 539.

risk was not overwhelming. No export of specie was going on, and the solvency of the banks and of their circulation was under no suspicion. There was reason indeed to expect that additional loans, being used to a great extent in making such payments as fell due at the banks, would be in substance a mere exchange of obligations and postponement of the time for actual liquidation. The chief difficulty of the case was to secure real concert of action. For accomplishing this, the Clearing-House Association, in which the banks were already united for important purposes, and from which no bank would willingly find itself excluded, was the natural agency.

A plan of operation was therefore settled upon, which should become binding upon all the banks in the Association, when adapted by three fourths of them. By this plan[1] the banks agreed that, for the purpose of enabling them to expand their loans, the specie reserves held by them should be treated as a common fund and, if necessary, should be equalized among the banks by assessments laid upon the stronger for the benefit of the weaker; and that, for the purpose of settling balances between the banks, a committee should be appointed with power to issue certificates of deposit to any bank placing with them adequate security in the shape of stocks, bonds, or bills receivable, and that these certificates should be received in payment by creditor banks. The effect

Plan of combined reserves adopted.

[1] The resolutions of the banks are given in full in the *Banker's Magazine*, 1860–61, p. 500, and also in the daily newspapers of November 22, 1860.

of this arrangement was that any bank which experienced an unusual demand for specie would be supported by the whole of the common stock, and that the debt to the others, which it thus incurred, could be met by a pledge of its securities. Whatever course might be taken then, any bank was as strong in specie as any other. A general increase of loans and liabilities might for the time weaken all, and if there were a further loss of confidence in the community might expose all to a common danger; but no one bank, by holding back its loans, could strengthen itself above the others, since the specie which it might thus collect must be held subject to assessments for the common benefit.

This plan was adopted November 21, 1860, and under it certificates were issued finally amounting to $10,000,000, all to be redeemed by February 1, 1861. It was also provided that after that date any bank whose specie fell below one fourth of its liabilities should cease discounting until that proportion was recovered, under penalty of expulsion from the Clearing House. Into this combination all the New York banks entered, except the Chemical Bank, an institution with remarkably large and steady deposits and small circulation, which preferred to leave the Clearing House rather than throw its large reserve of specie into the common stock.

The effect of this arrangement was instantaneous. The announcement that it had been made quieted the money-market and ended the panic. In the next week the banks increased their loans rapidly,

and nearly the whole of the additional loans went to swell the mass of deposits, with only an inconsiderable loss of specie.[1] The expansion was continued at a more moderate rate for several weeks until, under the natural effect of the revulsion in business, the demands for loans fell off and specie began to accumulate. The great causes which had produced the crisis were still at work, and a general stagnation and liquidation were inevitable; but the combination of their reserves had probably saved the banks for a time from the suspension of specie payments, which the civil war was destined to bring in its train thirteen months later.[2]

Its complete success.

Although, however, this combination was the turning-point of the panic and was favorably received by the general public, it was the object of much criticism. It was declared by many to be a disguised suspension of specie payment, since the debts of the banks to each other were no longer

[1] The reported condition of the New York banks for four weeks was as follows (stated in millions):

	Loans.	*Circulation.*	*Deposits.*	*Specie.*
Nov. 10 . . .	$125.6	$9.5	$79.	$21.1
17 . . .	123.3	9.3	76.2	19.5
24 . . .	122.5	9.	74.	18.8
Dec. 1 . . .	129.5	8.8	80.7	18.5

These figures being averages, the week ending November 24th shows a fall of loans, although there was a heavy expansion in the last three days.

[2] For the revival of this arrangement in April, 1861, and for the issue of certificates and equalization of specie in the summer and fall of that year, see the report of the committee in the *Banker's Magazine* for 1862–63, p. 136.

settled by the payment of specie, but by a pledge of securities. But it was answered triumphantly by the bank managers, that the power of the public to obtain in specie the payment of deposits or the redemption of notes remained unimpaired. So long as the convertibility of the bank-note was maintained, how could it be said that specie payments were even virtually suspended, although the banks should mutually forbear to demand specie from each other? The arrangement was in fact a temporary fusion of the fifty banks of the city in their relations to each other, but without prejudice to any of the rights of the public.

The general crisis of 1873 had its beginning in New York, with some important failures, on the 8th of September. It developed rapidly, and by the 18th a panic had set in, which was heightened in the next two days by several serious failures of banks and banking houses, and by the rapid withdrawal of balances by country banks and other depositors. The pressure to realize upon stocks, and the consequent excitement in the market became so intense that on the 20th the Stock Exchange was closed for ten days. The sale of foreign exchange drawn against exported merchandise was soon completely blocked, and the Treasury was at last urged by many, with little regard for its limited authority, to use its funds in the purchase of bills.[1] The banks,

[1] Some of the correspondence on this subject was given by the Secretary of the Treasury in the *Finance Report* for 1873, p. 13. See also *New York Times*, September 26th.

in this state of affairs, acted with little promptness. Whether they could have stayed the progress of a panic, which was, in fact, the awakening from an intoxicating speculation, may be doubted. At any rate, it was not until the evening of Saturday, September 20th, that they determined upon an issue of Clearing-House loan certificates to the amount of $10,000,000, and agreed to equalize their reserves by assessment, if necessary.[1] The fact that specie payment had been suspended since the close of 1861 did not materially change the problem with which they had to deal; and they accordingly adopted the same votes as in 1860, with few changes, except the phrases needed to recognize the fact that their liabilities now imported the obligation to pay in "lawful money" only, and not in specie.

The same plan followed in Sept., 1873.

This measure, however, proved to be unavailing. The shock which had been given to confidence was too severe and too general, the drain upon city banks by the demand of country corresponding banks strengthened, and legal-tender notes rapidly disappeared from the reserves. In the effort to withstand this movement, the banks, on Wednesday, the 24th, increased the issue of loan certificates to $20,000,000. On the same day, however, it was

[1] The votes adopted by the banks are given by the Comptroller of the Currency, *Finance Report* for 1873, p. 90; and in the *Commercial and Financial Chronicle*, September 27, 1873, p. 410.

For the amount of certificates issued in 1873, see *Report* of the Comptroller of the Currency for 1884, p. 38.

That the legal tenders were equalized for the first time on the 25th, see *New York Times*, September 26th.

reported that in many cases the payment of checks calling for legal tender in large amounts was refused,[1] and this proved to be the beginning of a suspension of payments, which, in a day or two, became general throughout the country, and lasted until November 1st.[2] The banks continued to meet at the Clearing House and to settle their demands against each other by means of certificates, and payments were made as usual by checks, in cases where these could be deposited by the payee and so could pass through the Clearing House. The necessities of depositors having large payments of wages to make were often met by payment in legal tender, and also many of the small checks required by the necessities of every-day life were so paid. This, however, was by favor, and it still remained true that for most purposes payment upon demand by the banks had stopped. The reserves, which had shrunk rapidly down to the suspension, continued to decline until they reached their lowest point October 13th,[3] when, in the general stagnation of business, the banks began to regain their strength by a natural process.

Suspension nevertheless followed.

In May, 1884, the banks of New York again found themselves confronted by a rapidly developing crisis. An uneasy feeling had prevailed from the

[1] *New York Times*, September 25, 1873.

[2] See statement by the Comptroller of the Currency, *Finance Report* for 1873, p. 91.

[3] The weekly publication of the returns made by the banks to the Clearing House was discontinued during the suspension of payments, but the Comptroller of the Currency, *Finance Report* for 1873, p.

beginning of the year, and failures, loss of confidence, and decline of prices had strongly marked the spring months. Some apprehension that the United States Treasury might find it necessary to resort to payment in silver had also disquieted the public, and led to a serious withdrawal of deposits, which left the banks but ill prepared for any severe strain.[1] On May 6th the Marine National Bank failed, under circumstances of extraordinary dishonor; on the 13th the Second National Bank of New York disclosed an immense defalcation by its president, and on the next day the Metropolitan National Bank and several important private firms suspended. This was the signal for action by the associated banks, and they accordingly on the same day, May 14th, adopted for the third time the plan of settling their balances with each other by means of certificates of deposit, and this time without limiting the amount to be issued. They did not deem it necessary to adopt the further provision of the plan of 1860 and 1873, for equalizing reserves by assessments in case of need. That provision was

The plan succeeds in May, 1884.

95, gives the following comparison for the national banks of New York (stated in millions):

	Sept. 12.	*Oct.* 13.	*Nov.* 1.
Loans	$199.2	$179.1	$169.2
Deposits	100.	89.7	92.6
Due to banks	72.6	38.8	36.9
Circulation	27.5	27.8	27.8
Legal tender	32.3	6.5	15.7
Specie	14.6	10.	11.5

See also *Finance Report* for 1874, p. 170, for weekly average liabilities and reserves of the same banks for September and October, 1870–74.

[1] Some instructive comments as to the course of affairs earlier in the year are made by the *Commercial and Financial Chronicle*, May 31, 1884, p. 632. See the table in the note on p. 77.

framed, it is probable, to guard against that kind of discredit which finds its expression in a "run" upon particular banks, by depositors or noteholders, such as was seen in the panic of 1857; but although such a contingency is never impossible, it no doubt now appears far more remote than formerly, since the ability to meet the Clearing-House settlement is accepted by the public, as well as by the banks themselves, as the sufficient guaranty of solvency. And the simple resort to the issue of certificates proved in 1884 to be sufficient for the purpose, being resorted to before the situation had become too desperate.[1] It quieted the apprehensions of the public and enabled the banks, although contracting their loans in general, to give assistance with confidence when it could be given legitimately. The process of liquidation, with diminishing loans and deposits, went on for some weeks, the reserves of the banks fell below the legal minimum, but the stress of the crisis was passed by the general public in safety.

The severe crisis of November, 1890, compelled the New York banks for the fourth time to combine

[1] The average condition of banks of the New York Clearing House, for a series of weeks, was as follows (stated in millions):

	Loans.	*Circulation.*	*Deposits.*	*Reserve.*
February 16 .	$345.9	$14.5	$363.5	$110.9
April 26 . .	343.4	14.5	335.7	86.3
May 3 . .	342.	14.4	333.2	84.1
" 10 . .	333.4	14.2	329.8	86.9
" 17 . .	326.6	14.2	317.2	82.4
" 24 . .	313.2	14.3	296.6	67.5

The vote adopted by the banks of New York is given by the daily newspapers of the date, and also by the Comptroller of the Currency in his *Report* for 1884, p. 33. On p. 37 is a statement as to the amount of certificates actually issued in 1884.

their reserves for general defence, by the resort to loan certificates. A long-continued fall in prices at the stock exchange, the unexplained alarm shown in the London market, and the low state of reserves, had finally, at the beginning of the second week of November, resulted in a dangerous collapse of prices and in several failures and the notorious embarrassment of two or three banks. The banks voted the issue of certificates on the afternoon of Tuesday the 11th, again without limit of the amount, with the effect of a considerable recovery in tone by the general public on the next day. The week was marked by a train of disasters, culminating on Saturday with the news that the old house of Baring Brothers had gone into liquidation. The crisis was safely passed, however, without the development of panic. Fresh loans were not to be had, in the general pressure, but renewals were made freely, and by the end of the year the business community found itself in comparative safety, tided over a complication of financial misfortune which at times had appeared nearly hopeless.[1]

Again succeeds in Nov., 1890.

[1] The average condition of the New York banks, for a series of weeks, was as follows (stated in millions):

	Loans.	*Circulation.*	*Deposits.*	*Reserve.*
Oct. 18 . .	$406.1	$3.5	$403.5	$100.5
Nov. 1 . .	399.8	3.5	396.3	99.8
" 8 . .	398.9	3.5	392.3	95.5
" 15 . .	393.3	3.5	386.6	95.8
" 22 . .	387.3	3.6	381.7	95.5
" 29 . .	384.5	3.5	376.9	95.
Dec. 13 . .	386.	3.6	376.7	94.8

Some particulars as to the amount and form of the certificates issued on this occasion are given by the *Commercial and Financial Chronicle*, Jan. 3, 1891, p. 17.

The banks of Boston have usually followed the example of those in New York, with such changes of method as their special needs seemed to advise. In November, 1860, a proposition was made in the Boston Clearing House to adopt the New York plan without change, but after much debate this was rejected, and it was voted, on the 24th, that any bank owing a balance at the Clearing House might pay in its own notes to the extent of fifty per cent. of the balance due, provided the amount of notes did not exceed a certain proportion of the capital of the bank, varying from one tenth for the smaller banks to one twentieth for the largest.[1] The expedient of making a common fund of specie was rejected, and on the whole the Boston banks failed to secure satisfactory unanimity of action. They passed through the crisis, however, without suspension, with the aid, it was said, of some forbearance by creditor banks in New York. In 1873 the Boston banks voted, September 27th, to suspend currency payments in consequence of the suspension in New York, and also to issue loan certificates, for use at the Clearing House, to the amount of $10,000,000, "upon substantially the same basis as issued by the banks in New York City." In this case also they did not adopt the method of equalizing reserves by assessment.[2] In 1890 the Boston banks, November 17th, determined upon the issue of loan certificates without limit as to amount, but bearing the high interest of $7\frac{3}{10}$ per cent.

[1] *Boston Daily Advertiser*, November 26, 1860.

[2] *Ibid.*, September 29, 1873.

It is clear that the dangers from which the banks of New York and Boston have sought to escape by this repeated resort to temporary combination are inherent in a many-reserve system. High authority has pronounced such a system to be the natural one and presumably the best, in itself considered.[1] But it is clear that, in banking, "a republic with many competitors" means not merely a divided responsibility, but at times the probability that required action will be impossible, unless some means are found of securing uniformity at the expense of individual independence,—in other words, some means of practically converting many reserves into one reserve, under a common authority, for the time being. With many reserves, the banks of a community like New York, managing each for itself, traverse with ease and profit the period of rising confidence and general expansion. They combine their reserves in effect, by enabling each to convert its securities into the equivalent of cash at the Clearing House, when the critical moment of alarm and revulsion comes. At that moment, it appears, the confidence of the public is best secured by showing that the natural system is for a time superseded by something not unlike a vast consolidation.

This combination is sometimes timely and successful, as in 1860 and 1884, and sometimes tardy and unsuccessful, as in 1873. But inasmuch as its effects under proper conditions are well recognized, it is sometimes suggested that some such system should be made permanent. Why not have relief

[1] Bagehot, *Lombard Street*, page 67.

all the time, it is asked, instead of occasionally? The answer to this question must be, that what is effective by way of relief is not necessarily salutary as a regular system. The relief in this case comes from the fact that, under the arrangement for combined reserves, every bank is for a time completely discharged from any real sense of responsibility for cautious action. Slight as its share of responsibility may be under ordinary circumstances, under this arrangement it is free to expand, or to neglect ordinary precautions, at pleasure; the arrangement is entered into for the precise object of thus setting it free, and it is in the public knowledge of this fact that the virtue of the arrangement consists. But, under ordinary circumstances, it is not in any diminished sense of responsibility that the way to sound banking and to the ultimate good of the whole community is to be found. On the contrary, the problem, both in legislation and in theoretical discussion, now is, how to bring the sense of public duty in the management of private interests to the aid of the legal provisions by which bankers are hedged about.

The system not fitted for permanent use.

CHAPTER VII.

THE BANK OF AMSTERDAM.

THE sixteenth, seventeenth, and eighteenth centuries give many examples of a class of establishments performing some of the functions of banks and playing a great part in the commercial history of their time, and yet answering imperfectly to the modern definition of a bank. Of these, the Bank of Venice and the Bank of Amsterdam were in their day the most celebrated, and the Bank of Hamburg was the last to disappear. As a type of the class the Bank of Amsterdam has perhaps a better claim upon our attention than any other.

At the close of the sixteenth century the commerce of Holland had already taken such a form as to make Amsterdam a leading city in international dealings. Foreigners found there the supplies of goods brought in by the Dutch from all parts of Europe and from the East Indies, and specie flowed in abundantly in payment for goods and for the services of the Dutch shipping. This stream of payments often made it convenient to settle other transactions also through Amsterdam as a financial centre, and thus

Amsterdam a centre of trade.

both the variety and the amount of the bills of exchange, coming into the Amsterdam market for payment or for sale, rapidly increased. Such a concentration of dealings in money could not fail to develop some of the convenient practices of banking. Individuals began to deal in foreign exchange and to buy and sell coin and bullion; and, sometimes in connection with the exchange business and sometimes independently of it, began to receive money on deposit, and to effect payments, when ordered by customers, by transfer from one account to another. That with these dealings the business of lending was also carried on follows almost as a matter of course, so that it is probable that by the end of the sixteenth century the issue of notes was alone wanting to make the development of private banking in Amsterdam complete.

The currency used in these transactions was the multifarious coinage of the Dutch provinces and cities, and the great variety of coins brought in from all parts of the commercial world in the regular course of payments. The standard coin in use was the Netherlands riksdaler, but no small part of the specie in actual circulation, even of the riksdalers, was below its legal weight, either from wear, ill usage, or irregularity in coinage.[1] Coins of full weight tended to disappear,

The currency confused and depreciated.

[1] Adam Smith, *Wealth of Nations*, Book IV., ch. iii., "Digression Concerning Banks of Deposit," gives a brief account of the condition of the currency of Amsterdam at this time. Sir James Steuart, *Principles of Political Economy*, ii., p. 78, devotes a chapter to a minute but difficult account of the Dutch coinage.

The Netherlands riksdaler, from 1606, contained 528½ azen of fine

except when a premium paid in the light coin of every-day use brought them out. The confusion which resulted from this state of things extended to foreign exchange as well as to domestic trade, and some cure for it was felt to be necessary for the solid prosperity of the city. The cause of the difficulty was so little understood, however, that the city administration did not look to the restoration of the local coinage to sound condition for a remedy. They formed the opinion that the bad condition of the current money was due to the practices of the dealers in specie, and that the heavier coins were driven out by the increasing use of bills of exchange as a substitute for money. The first action taken then was directed against the deposit bankers and dealers in specie and exchange.

More than one effort had been made to restrict and regulate the dealings of these persons, when in 1608 the rise of the premium on some kinds of heavy money to nine per cent. stimulated the administration to extreme measures. By the statute of July 15, 1608, the business of deposit-holding was absolutely prohibited, and the receiving or paying out of money for another person, or its transfer by writing or by word of mouth, directly or indirectly, was forbidden under a penalty of twenty-five per cent., one half to be levied upon the banker, and the other

silver, or nearly 392 grains Troy, being equal in contents to about $1.05½ of American standard silver. The gulden was only a money of account previous to 1681, the riksdaler being rated at 2⅝ gulden from 1608 to 1622, and from this date at 2½ gulden. The gulden contained 20 stuyvers.

upon the customer. The use of bills of exchange or assignments in making payment was forbidden, and every one was charged to make and receive payments of his own debts or credits, by himself or his agents. And finally all were admonished neither to give nor take any description of money at a higher rate than that fixed by the States-General, and not to cull the heavy coin from the lighter in order to make a profit.[1] Upon the demand of merchants it was found necessary, a fortnight later, to moderate some of these provisions slightly, but even then the measure showed plainly the opinion of the administration, that private speculation and an extended use of credit were responsible for the bad condition of the local currency. The substitution of direct payments for the convenient mode of dealing through cash-keepers or bankers, however, was intended to be, and was in fact, only a temporary measure. The city administration had for two years been maturing a plan for a great establishment, which should concentrate under public authority the whole business of keeping assignable deposits of cash and of dealing in specie, and this scheme was finally put into operation by the city ordinance of January 31, 1609, which created the Amsterdamsche Wisselbank, or Exchange bank, since known as the Bank of Amsterdam.[2]

The Wisselbank established by the city.

[1] The text of this remarkable act is given by Mees, in his excellent history of the Bank of Amsterdam, *Proeve eener Geschiedenis van het Bankwezen in Nederland, gedurende den tijd der Republiek*, door W. C. Mees [formerly President of the Bank of the Netherlands]. Rotterdam, 1838; pp. 351. See p. 279.

[2] The ordinance is given by Mees, *Bankwezen*, p. 283.

The provisions of this ordinance were simple. It provided that any person might bring money or bullion for deposit and might withdraw at pleasure the money or the worth of the bullion, provided that deposits should not be made of less than 300 gulden in amount and should not include more than three per cent. of small silver. The bank was also required to sell any kind of specie demanded of it, at as low a premium as possible. Deposits payable upon demand having been provided for and made transferable, the ordinance then required that all bills of exchange of 600 gulden or upwards[1] should be paid through the bank, or in other words, by the transfer of deposits or credits in bank. Deposits were exempted from seizure by process of law, and a commission of $\frac{1}{40}$ of one per cent. on the amount deposited or paid out was prescribed to be paid to the bank. By a natural usage, the transferable deposits or credits soon came to be known as "bank money," and were so called throughout the history of the bank.

The purpose of this ordinance was advanced still further by a statute of November 30, 1609, providing for the appointment of outside receivers for the bank, who should be authorized, for the convenience of the public, to receive deposits and payments at their offices, sums so received to be paid over to the owner or carried to his credit at the bank within three days. No assignments could be made on the books of the receivers, however; they were forbid-

[1] In 1643 this limit was lowered to 300 gulden. Mees, *Bankwezen*, p. 114.

den to take or pay out any kind of specie at a different rate from that established by the States-General, or to deal in any kind of specie for profit; and provision was made for their compensation by a commission on deposits and payments. The receiving or paying out of money for others by private cashiers, even within the narrow limits finally conceded in the summer of 1608, was strictly forbidden, and thus the greater part of the business of banking and dealing in money and exchange, so far as it was yet developed, was concentrated by law in the hands of the bank and of its receiving agents.

The advantages offered by the bank as thus organized were those of a secure system of deposit and a fixed standard of payments. It used its credit in no way to displace the specie currency of the city, but only as a representative of so much of that currency as might be present in its vaults, by promising to pay deposits to the owners or their assignees. As the bank received deposits only as valued in money of full weight and paid out such money only, the value of a credit upon its books was the same as that of good coin, varying at times seriously from the average value of the degraded medium in common use, but after all representing only what the average value should have been. The value of the deposit was made certain then, except in the case of a possible alteration of the mint standard by the government.[1] Payments between individuals

The deposits become a currency.

[1] Changes in the value of the gulden banco were thus made in 1622, 1645, and 1654, which progressively lowered the standard,

by the transfer from the deposit account of one person to the account of another, or in other words, payments in bank money, were a chief function of the bank from the start. These transfers appear to have been made at every period of the bank's history by means of an order, presented by the payer in person or by his usual authorized agent, and not available by the payee until the next day, and thus many of the conveniences secured by the modern use of the check were missed.[1] Still, in the more deliberate movement of the seventeenth and eighteenth centuries, the activity even of deposits transferred in person made these a valuable part of the commercial machinery of the cities using them.

The establishment of such a bank of deposit then, and the requirement that bills of exchange when negotiated or maturing should be settled for by transfers in bank, had the great advantage of freeing the important transactions of merchants, and especially their foreign dealings, from all risk of confusion or uncertainty arising from the bad condition of the current money. Some of the consequences of an evil, with which the state was not ready to cope directly, were thus avoided with great success. Venice had had the same evil to deal with and had met it in 1587 by establishing the Banco di Rialto, the forerunner of the more famous Banco del Giro,

leaving the gulden banco at a premium, however, which represented the difference between the mint standard for the time being and the coin in actual use.

[1] As to the method of transfer see Ricard, *Traité Général du Commerce* (edition of 1781), i., p. 77.

seeking to concentrate all deposits and all dealings in exchange in a single bank controlled by the government. It is not to be assumed, however, that Amsterdam, twenty-two years later, was in any true sense indebted to Venice for the idea upon which she acted. Both cities adopted banking practices which private persons had long since evolved, and both took the obvious method of seeking to manage, by public authority, branches of business which it was believed were managed ill by individuals.

It is obvious from what has been said above, that whatever difference of value between the deposit accounts of the bank and the money in ordinary circulation may have been observed in the earlier days of the bank, could only have been the difference between the money of full weight received and paid out by the bank and the average coin in circulation. So long as the bank received deposits freely from all comers and paid depositors on demand, no convenience arising from the use of deposit accounts in payments, or sense of security on the part of depositors, or obligatory use of deposit accounts in settlement of bills of exchange,[1] could cause any thing more than a transient fluctuation in the value of bank money above or below the specie standard. But the specie used by the bank as its standard tended to become scarce.

The premium upon the bank money.

[1] Serionne, *Richesse de la Hollande*, i., p. 154, declares that the provision as to bills of exchange was not observed (1778), being "inexécutable." "Tous les jours on voit à Amsterdam nombre de lettres de change payées hors de la banque, l'agio étant réglé suivant le cours." See also Mees, *Bankwezen*, p. 115.

"Bankable" money, or, as it came to be called, "bank specie," was at the beginning the heavy Netherlands riksdaler of silver, of which the value in receipts and payments at the bank was expressed in gulden, according to the legal standard of weight. But from the beginning the gulden of account at the bank, being a fixed part of the heavy riksdaler, stood at a premium as compared with the light coin in every-day use; and even after the alteration of the nominal weight of the gulden in 1622, the gulden banco bore a premium of over four per cent. Other changes in the mint weight followed in that century. The heavy riksdalers, the chief bank specie of the earlier days, became so scarce that from time to time notice had to be given that other coins, if of full weight, would be received as good bank specie at a fixed rate measured in gulden, and paid out at the same. Still the premium on bank money marked in the same way the difference between it and the deteriorated coin in common circulation.

It is clear that the original theory of the bank as a bank of deposit did not contemplate lending as one of its functions. Established without a capital, it was understood, both by the ordinance which created it and by the public, to have actually in its vaults the whole amount of specie for which bank money was at any time outstanding. The original scheme did not provide for any further use of its credit, and the bank therefore failed to answer the definition of a bank in the modern sense. Having no means of holding securities as a source of income, and the specie deposited with it being idle, the

establishment could meet its expenses only by the charges which it levied upon depositors, for the opening and management of their accounts and for making transfers. The great number of accounts opened, however, and the extended use of bank money as a circulating medium, made the bank a considerable source of revenue for the city[1]; and this income was naturally increased when the original deposit business of the bank was replaced by a new method of advancing upon coin.

The system of advances upon specie.

In January, 1683, the bank established a system of making advances upon deposits of coin, upon a plan which had already had a short trial in 1656, and which finally determined the character of the institution for the remainder of its existence.[2] The advances were made by giving to any depositor of specie a credit on the books of the bank, for an amount of bank money not far from the actual value of the specie reckoned in heavy coin, the depositor receiving at the same time a "recepisse," certifying his right to withdraw the deposit within six months, upon returning the bank

[1] Adam Smith sets the number of accounts at 2,000, but Mees prefers the estimate of 5,000 given by Oudermeulen, *Bankwezen*, p. 111. The net return to the city in different years varied from a profit of 266,000 gulden in 1781, to 28,000 in 1784, and from 1609 to 1796 averaged 65,500 gulden. *Ibid.*, p. 149.

[2] This system of advances occupies an important place in Adam Smith's account of the bank, and Smith says that he received "the most distinct, as well as liberal information" concerning the bank from Mr. Henry Hope of Amsterdam, the well-known banker. See, in the *Wealth of Nations*, the advertisement to the fourth edition, page lvii. of McCulloch's edition. Mees discusses the system of advances thoroughly, *Bankwezen*, pp. 95, 135.

money with which he had been credited and paying therefor one eighth of one per cent. interest. The depositor also had the privilege of renewing the deposit, upon the payment of the specified interest, for the further space of six months, and so on without limit; but if the specie was not withdrawn nor the transaction renewed at the end of any period of six months, the deposit became the property of the bank and the recepisse given for it expired. The advances upon this system were at first made on a few descriptions of coin only; but as time went on other descriptions of Dutch money, both gold and silver, were received, the commonly current foreign moneys were also accepted, and at times advances were made upon bullion. In an age when a varying demand for a particular coin, in such a market as Amsterdam, might cause frequent and considerable fluctuations in its current value, this system afforded the owner of specie an attractive method of obtaining the present use of his money and also saving the chances of its rise in the market. This class of transactions therefore rapidly increased, and although a large part of the specie deposited became the property of the bank, by the failure of the depositors either to redeem it or to renew their recepisses,[1] the business of advancing upon specie appears in the eighteenth century to have completely superseded the earlier practice of simple deposit.

The adoption of the system of advances upon specie in 1683, however, not only changed the form

[1] The nature and purpose of the recepisse have been strangely misconceived by McCulloch and McLeod. *Quarterly Journal of Economics*, October, 1888, p. 107.

of the transaction by which the bank money was created, but also had an important effect upon the convertibility of the bank money. There is no question that in the earlier years of the bank the owner of bank money had the right to demand its redemption in specie, and that its convertibility at the will of the holder was relied upon to insure its steadiness of value. The language of the ordinance of 1609 shows this to have been a part of the original scheme, and the long succession of regulations made necessary by the fluctuating value of coin in the next seventy years constantly regulate the payments to be made by the bank in redemption. In 1672, in the alarm caused by the advance of the French to Utrecht, payments were made on a great scale, in the presence of what appears to have been a "run" upon the bank. But in the eighteenth century the redemption of bank money upon demand had ceased. No precise date can be assigned for its discontinuance; no ordinance or other legal authority for such a vital change has been cited; but the fact is established, that by the middle of the eighteenth century the right of demanding payment had been obsolete so long, that more than one writer of that age doubts whether it ever had existed. As a substitute for the regular redemption of bank money over the counter, the bank had adopted the method of selling through outside agents, either bank money for specie or specie for bank money,[1] at fixed rates and usually in such

Bank money becomes inconvertible.

[1] Sir James Steuart, *Principles of Political Economy*, ii., p. 302. Smith, *Wealth of Nations* (McCulloch's edition), p. 214. Savary, *Le Parfait Négociant* (edition of 1752), i., pp. 483, 484.

amounts as the public might require. Thus, for many years the bank bought in bank money when the agio on it fell to $4\frac{1}{4}$ per cent. and sold whenever the agio rose to $4\frac{7}{8}$ per cent., and by this means limited the fluctuation of bank money within such narrow limits as seemed to bespeak remarkable fixity of value. But this was after all a substitute for convertibility, and not convertibility itself. Throughout the most flourishing period of the bank, certainly for the last century of its existence, the currency supplied by the Bank of Amsterdam was an inconvertible currency.

This inconvertibility of the bank money was a natural, though perhaps not a necessary, result of the introduction of the system of advances upon other money than the strictly bankable coin in which the bank had hitherto made its payments. Under its earlier system the bank was expected to have in its vaults specie of the same kind as that which it was bound to pay and to the full amount of its debts. But its advances upon other descriptions of specie added to the mass of bank money calling for payment in bankable specie, without adding to the amount of such specie held by it. It held specie no doubt for its bank money, but not exclusively specie that could be used in payment,—valuable assets, but not necessarily available assets. As the recepisses expired, this unavailable specie became the property of the bank, and although at the present day the maintenance of regular payments by means of such a resource would appear easy, even when the amount of actually available specie in

hand might not be large, it may well have appeared otherwise to the less experienced managers of two centuries ago. It may easily have seemed to them to be safer and equally advantageous for the public to provide for taking any excess of bank money out of the market, without continuing to give to every holder a right to demand payment in certain limited descriptions of coin.

It has been pointed out also that this course, which met the supposed needs of the bank, also answered sufficiently the convenience of merchants. To sell bank money at the current quotation for current money, was a simpler operation for the merchant who required specie, than to arrange with the bank officers for the premium at which a particular description of coin should be taken, or than even the conversion of bankable coin received from them into ordinary current cash. It is not unlikely that in practice the purchase and sale of bank money for cash had become so well recognized as a substitute for direct demands upon the bank, that merchants only needed an assured opportunity for purchase or sale at the will of the individual, in order to discontinue altogether the earlier practice of redemption. This opportunity was given by means of outside agents or cashiers, as has been stated above. A radical change of method was thus introduced by a natural process, without requiring the bank at any stage to announce the formal discontinuance of regular redemption, and the mercantile community of Amsterdam lost the tradition of the old right of demand

This change took place insensibly.

upon the bank, with the facility with which such communities everywhere forget all that is not matter of actual record.[1]

Bank money then had no fixed value.

But the change, although easily made, imported a radical change in the character of the bank money and the grounds on which its credit rested. If the action of the outside agents of the bank had been completely automatic and recognized as such, if they had bought and sold bank money in answer to all demands and to whatever amount, even with such a range of rates as is stated above, the distinction between such an arrangement and ordinary convertibility would have been thin. But in so far as their action was not automatic, but depended upon the irregular will of the managers of the bank, the bank money was an inconvertible currency, with its fluctuations moderated by the interference of the issuing body. The occasions were not few in the eighteenth century on which the low agio

[1] The ordinance establishing the bank in 1609 provides that every one may bring to it such moneys or bullion as he may see fit, "and the same moneys or the worth of the said bullion draw out again at his pleasure." Marperger, *Beschreibung der Banken*, p. 120, appears to recognize the necessity of payment in some cases, writing in 1716. But the later commercial writers, as well as Smith and Steuart, treat payment on demand as non-existent. Oudermeulen, *Récherches sur le Commerce*, ii., part i., p. 58, states the case thus: "Si la Banque n'achette pas pour elle même de l'argent de Banque, son dépôt ne peut pas diminuer. Car qui peut obliger la Banque à faire sortir les deniers ou les Especes, si les reçus n'existent pas? Du moins j'avoue que je n'en ai pas vu d'exemple de mon tems."

Bondt, in his *Consideratien over 't Bankgeld*, argues that the right to demand the payment of bank money was never lost by non-user. *Nieuwe Nederlandsche Jaarbocken*, 1791, p. 296.

on bank money showed the insufficiency of the purchases made for the bank, and their failure to answer the purpose of regular redemption; and that the public retained its faith in the bank under these circumstances, and notwithstanding the profound secrecy which covered all its transactions, can only be ascribed to a blind belief in the wise management of the institution and a widespread notion that the bank money had a fixed value of its own, so that no change of agio could be significant of any thing amiss in the affairs of the bank.

Condition of the bank kept secret.

How completely the transactions and condition of the bank were kept secret is shown by the general ignorance which prevailed as to the real extent of its business. The increase of bank money being limited by its uses as a circulating medium and by the more or less steady withdrawal of any surplus, the actual amount of such money outstanding, and of coin and bullion represented by it, was probably at no time so great as the public supposed. The important position of the bank in Amsterdam, and the place which Amsterdam held among the markets of Europe, seemed to make the bank a vast storehouse, in which the supplies of the precious metals received from all parts of the world, generation after generation, were buried in a constantly accumulating mass. Savary set the amount of specie in the vaults at 300,000,000 gulden; Melon set it at 400,000,000, and the Dutch editor of Melon corrected this by the conjecture of 800,000,000 or 900,000,000. Magens made the more sober estimate of 60,000,000, and finally Adam Smith

set the amount for 1775 at about 33,000,000 gulden.[1] There is reason, independently of the high authority from which Smith received his account of the bank, to believe that this figure represented very nearly the ordinary amount for which the bank was indebted during that part of the eighteenth century when its business was most flourishing. This reality, however, fell far short of the fabulous sums which long-established tradition represented as lying in the mysterious vaults under the Stadthaus.

The administrative organization of the bank was well contrived for the preservation of this secrecy.

Its administration organized for secrecy.

The city government appointed a board of commissioners, at first three in number and afterwards seven or eight, to take charge of the bank and to make an annual report upon its affairs. The greater part of the commissioners were taken from the city government

[1] A variety of conjectures are collected by Mees, *Bankwezen*, p. 111. Sir William Temple, in his *Observations upon the Netherlands* (1673), speaks of the bank as containing "the greatest treasure, real or imaginary, that is known anywhere in the world." But he seems to have had a shade of doubt as to its complete reality. For Melon's estimate see *Essai sur le Commerce* (edition of 1742), p. 241. Oudermeulen, ii., part 1, p. 66, after saying that the treasure of the bank is large, adds: "J'ai été en état d'en parler pertinemment et avec certitude, par le bonheur que j'ai eu de rencontrer quelques Bilans de notre Banque, entr'autres ceux des années 1727, 1739 & 1740, & encore un plus récent. J'aurois donc pu spécifier à quelle somme se monte ordinairement le dépôt ; mais la discretion ne me l'a pas permis. D'ailleurs cet objet ne pourroit tout au plus servir qu'à satisfaire une curiosité, dont le public ne pourroit pas tirer la moindre utilité. Tout ce que je puis assurer, c'est que le dépôt est très-considérable." The reasons for this discretion, it will be seen, became manifest a few years later.

itself, however, and all were sworn to obey its authority, so that no independent judgment or influence could be looked for as a check upon the policy or determinations of the city councils; and, as a further security against any possible influence of this kind, the officers of the bank, who were under the orders of the commissioners, were also strictly bound to obedience to the burgomasters. The bookkeepers and clerks, as well as the commissioners, were sworn to strict secrecy as to every thing which related to the condition of the bank, and the obligation was not relaxed if the individual ceased to be an officer. In this way all real power was kept in the hands of the city authorities, without danger of opposition or even of criticism, and all knowledge of the steps taken or of the real state of affairs at any given time was confined almost as completely to those who were responsible for any misguidance or error.

In an age when the importance of publicity was not yet understood, this jealous exclusion of the light does not appear to have injured the credit of the bank. Secrecy appears to have been accepted by all the world as the natural method of managing important interests, and it was enough that the city of Amsterdam had pledged its faith for the safekeeping and proper application of the treasure in its hands. At intervals, for the last century of the existence of the bank, doubts were raised as to the actual presence of all the specie represented by the bank money, but these appear to have been easily satisfied, or dismissed as unim-

portant, although it is now certain that in some cases at least they were well founded. In the absence of any published accounts it was always possible that the city administration, for reasons of its own, might make loans to individuals or companies by crediting them with bank money without receiving any deposit of specie therefor, or might by the same process borrow from the bank on behalf of the city, and at times the suspicion of some such operation was afloat, strengthened occasionally by the failure of the bank to sustain the premium on bank money by sufficient purchases, and then laid aside as the premium regained its customary level. On the whole, however, it is clear from the language of the contemporary writers that in the last half of the eighteenth century the position of the bank had become a matter of debate.[1]

It does not appear, however, that serious alarm was felt as to the safety of the bank until the disclosures of 1790 and 1791. The public appears to have been ready to accept the explanation that a low premium on bank money was due to scarcity

[1] There is a good deal of evidence to be collected showing rather more than a passing doubt on this subject, but it is enough to cite the following: Steuart, ii., p. 307, discusses the question whether the treasure has been used for public purposes, and concludes that there is coin, to the full extent of the bank credits, actually in the vaults. Adam Smith (McCulloch's edition), p. 214, treats the question as to the actual presence of all the coin called for by the bank money in a somewhat guarded way, as if Mr. Hope, if the language used is his, felt himself to be on the defensive. Oudermeulen, ii., part i., p. 69, noticing a remark in Pinto's *Traité de la Circulation et du Crédit*, that the money in the bank could be made to circulate

and undue value of silver, and that large purchases of bank money under such circumstances would be followed by a heavy export of coin and bullion, to the injury of commerce. But in the winter of 1789 and 1790 the premium fell below two per cent.; in August, 1790, it had disappeared, and in November bank money was at two per cent. discount; and as the bank still did not protect its credit by purchasing bank money on any sufficient scale, the fear that for some reason it was unable to do so began to spread. On the 12th of November the city administration issued a notice, in which, after defending their inaction, on the ground that if they had bought bank money as usual in the falling market the specie would have been sent out of the country, they offered silver to all holders of bank money at a rate which was equivalent to a payment of 90 per cent., and proposed also to give credit at the same rate for silver bars deposited.[1] The right of fixing different terms after the current month was reserved, but as the bank proposed to receive silver as well as pay it out at the new rate, the

The Bank discredited in 1790.

without injury to credit or good faith, says that this is practicable only in two cases: first, if the city or state is in pressing need; second, if, *e. g.*, the East India Company should need some millions, which could be credited to them in bank money, and perhaps finally paid off by them with 3 per cent interest. Suppose, he says, that to 25 millions existing, 5 millions of pure credit are thus added, as if 5 ounces of alloy were added to 25 ounces of silver in the coin,—this would be mischievous and unjustifiable. Oudermeulen published his book in 1779, and this supposed case can hardly have been a random shot.

[1] The notice is in Mees, *Bankwezen*, p. 189.

lingering hope that bank money could rise was destroyed, and the proposition was regarded as a plan for settling debts at a discount, by a debtor who could not pay in full. It was insisted, on behalf of the creditors, that the old right to demand the redemption of bank money had not been lost by disuse; that the apprehension as to the export of specie was groundless, as the current had begun to flow towards Holland again, and that the city administration was bound in duty to use the treasure of the bank for the settlement of its debts and to procure by its own credit whatever might be needed in addition. The offer for settlement being generally rejected, the bank began to issue specie to its agents for the purchase of bank money, but early in February, 1791, this operation stopped, and the failure of the bank, after a carèer of one hundred and eighty-two years, was thus acknowledged.

The causes of its failure.

The general causes of this failure appear to have been understood, but few details were made public until the report made in February, 1795, by the committee of investigation, appointed by the provincial government of Amsterdam after the revolution in Holland.[1] From that report it appeared that the city was indebted to the bank for nearly 9,250,000 gulden, and that as security for this debt the bank held the obligations of the states of Holland and West Friesland for

[1] This report is printed in the *Jaarboeken der Bataafsche Republiek*, for 1795, pp. 157–160. It is noticeable that no statement is made in it as to the amount of bank money outstanding, or the amount of specie on hand.

8,850,000 gulden. This substitution of public obligations for cash, it further appeared, was the result of a practice which had existed for not far from a century and a half. Even before 1657 the administration of the bank had suffered individuals at times to transfer more bank money than their deposits of specie warranted, which was a close approach to the method of making loans by giving permission to overdraw. In that year loans to individuals appear to have been discontinued, and in their stead the practice of lending upon interest to the Dutch East India Company was introduced. For many years the sums thus lent were small, but the faith of the bank was nevertheless broken, and the way was opened for larger operations. It appeared that, in 1760, of 30,000,000 gulden which should have been held by the bank in specie, it held barely 10,000,000, and the condition of affairs probably continued to be as bad as this for most of the remainder of the bank's existence.[1] For generations the peculiar constitution of the bank had enabled the administration to keep this guilty secret and to stifle suspicion. A system of banking of great utility, under which with a faithful management failure was impossible, thus ended in discredit and ruin, from a lack of any public knowledge of the real condition of affairs, and of any responsibility of the managers to public opinion.

In 1790 the city government had for a moment hinted a doubt as to its obligation to redeem the

[1] A more particular account of these transactions, from 1657 down, is given by Mees, *Bankwezen*, pp. 195–198.

outstanding bank money,[1] but this untenable ground was quickly abandoned, and in February, 1791, a loan of six millions was authorized, the proceeds to be used in redeeming bank money. In 1795 and 1796, between seven and eight millions were raised by loan in order to reduce the debt of the city to the bank, and an effort was made to resume the old business, but with little success. In 1802, under the influence of the Batavian government, it was announced that the debt of the city had been discharged and that there was no bank money outstanding beyond the metal actually in hand, and a decree was issued forbidding the commissioners of the bank to give any credit on its books except upon a deposit of specie, absolving them from obedience to any order inconsistent with this, and making them personally responsible for any breach of the new regulation. But it was too late to revive the bank. The exchange business could not be recalled, the commercial position of the city had changed, and the war for many years prevented commerce from seeking again its old channels. But more than all, the time for deposit banks of the old type had nearly passed and the need of the community was for banking on the modern system, of which the Bank of England had become the leading example. The present Bank of the Netherlands was therefore established in 1814, with authority to make loans by means of its credit upon commercial paper and pub-

Vain efforts to revive the bank.

[1] This question is argued at length on behalf of the creditors by N. Bondt, *Consideratien over 't Bankgeld*, printed in the *Nieuwe Nederlandsche Jaarboeken*, 1791, pp. 285–319.

lic securities. The Bank of Amsterdam still retained its nominal existence with the aid of some merchants who continued to hope for its revival, but was finally closed under a royal decree of December 19, 1819. The small amount of bank money still in existence was paid off, and in 1820 the establishment which for generations had held the leading place in European commerce ceased to exist.

CHAPTER VIII.

THE BANK OF FRANCE.

IN describing the leading modern systems of banking, it will be convenient to take the simplest case first. This is the case of a bank authorized to practise discount, deposit, and the issue of notes, but without any special provision for the safety of one class of liabilities rather than another. This primitive system was adopted for the first Bank of the United States, founded by Hamilton in 1791; and the same model was followed in establishing the second Bank of the United States in 1817, and in the earlier State banks. The Bank of England also was organized on the same plan until 1844. In all these cases the law provided so far as it might for faithful and honest administration, but left all the liabilities of the bank upon the same footing and equally a charge upon its general assets. Among existing banks, the Bank of France is a remarkable instance of this free organization, surviving, prospering, and enjoying the merited confidence of the French people, long after the public opinion of other leading countries has required special and elaborate provision for the safety of all bank credits taking the form of notes.

The Bank of France a bank of the simplest type.

From 1793 to the latter part of 1796, banking can hardly be said to have existed in France. The government tolerated no issue of paper except its own; the Caisse d'Escompte, which for many years before had been the only public bank, had been suppressed, and the times were too disturbed for private banking to flourish. With the disappearance from circulation of the *assignats*, and of their successors, the *mandats territoriaux*, the issue of notes appears to have become a matter of common right, to be undertaken by anybody who could gain the confidence of the public; and accordingly a bank of issue called the Caisse des Comptes Courants, was organized in Paris in the last half of 1796, and began its operations with fair success. Two others of some importance were established by the year 1800, besides some smaller ones of which little is now known; and in Rouen a bank of discount and issue was in active business as early as 1798. It is clear that, with the return of orderly government and the revival of credit, the need of banks began to press.

Under these circumstances the Bank of France was also established in Paris in 1800, with the encouragement of the government and even with the First Consul as one of its stockholders, but still upon a footing not essentially different from that of its neighbors. Its capital of 30,000,000 francs was the largest yet proposed, and the difficulty of raising it led to a fusion with the Caisse des Comptes Courants, but no monopoly was created. One public bureau, holding a large amount of funds, was required to invest them

Established in 1800, but with no monopoly.

in shares of the new bank, and large deposits were made in it by the government; still, although favored, the Bank of France stood legally upon an equality with the rest and nothing more.[1] So far it might be said that the field was open in France for a wide and free diffusion of banking facilities, and that by the new establishment the government pointed out the way for its citizens.

In 1803, however, Napoleon announced a complete change of policy, and the Bank of France was thereupon made the sole bank of issue, its capital was raised to 45,000,000 francs, and its charter extended to 1818.[2] All other issues of notes were at once withdrawn, one of the rival banks in Paris was absorbed by the rising monopoly, and another assumed for a time the humble place of intermediary between the great bank and its less important customers. No provincial bank could thereafter be established without the authority of the government. Under this arrangement, and notwithstanding the provision that no notes should be issued in Paris for less than 500 francs, the circulation of the Bank rapidly increased with its expanding discounts. It is plain in fact

Made the sole bank of issue, 1803.

[1] Courtois, *Histoire des Banques en France*, pp. 108–112. The articles of association, containing the statutes of the Bank, adopted by the shareholders at the start, are in the *Moniteur*, 5 Pluv. VIII. (25 January, 1800).

[2] The law of 24 Germinal XI. (14 April, 1803), is in the *Bulletin des Lois*, and, with most of the subsequent legislation concerning the Bank down to 1857, is also given in Wolowski, *La Question des Banques*, p. 425. The statutes of the Bank of 1803 are in the *Moniteur*, 15 Brumaire, XII. (7 November, 1803).

that the strong preference of the public for bank credit in the form of notes left but a narrow field for those banks which could only open deposit accounts, and justified the government in its opinion of the importance then to be attached to the right of emission. And the fact that in the existing state of things, with the existing habits of business, the credit in the form of notes was so strongly preferred, gave to the monopoly of the Bank an influence on the future history of banking in France far beyond that which a similar monopoly could have exercised in the same years in England.[1]

Although the Bank of France still chose its own officers and enjoyed a nominal independence, it was now becoming involved in the bold operations of the French Treasury. Complications thus arising reduced the cash in the Bank, in the latter part of 1805, so far that it was found necessary to limit the redemption of notes to 600,000 francs daily, until such time as specie could be collected in sufficient quantity for complete resumption. The result of this crisis, however, was not to separate the Bank from the government, but to connect them still more closely; and in the spring of 1806 a measure was therefore adopted which definitely settled the character of the Bank as a public institution, but without any alteration in the essential principles of its organization as a bank.[2] By

Placed under State control in 1806.

[1] That the government was actively hostile to the other banks of circulation, see Courcelle-Seneuil, *Traité des Opérations de Banque*, p. 217.

[2] *Bulletin des Lois.*

the doubling of its capital and the extension of its privileges to 1843,[1] not only its pre-eminence in the financial affairs of France, but its absolute importance in the European world, was assured, so far as depended on legislation. At the same time the direction of the Bank, hitherto confined to a board of regents chosen by the stockholders, was transferred to a governor and two sub-governors, to be nominated by the chief of the state. Under a government not inclined to use power for its own ends, this species of control might easily have become a mere trusteeship on the part of the state; under an emperor like Napoleon it made the bank an engine of the state,—a private corporation, indeed, as regards the legal ownership of its property, but a public office as regards the actual employment of the property. Successive governments in France have used this opportunity in different ways as the case has seemed to require; but such as Napoleon made the Bank, in pursuance of the law of 1806, it has remained ever since,—an institution subject to the control, and made subservient to the needs of the government of the day.[2]

In the closing years of the Empire, this subjection of the Bank to the government caused a great increase of transactions with the Treasury, which

[1] In 1840 the privilege was extended to 1867, and in 1857 was further extended to 1897.

[2] The statutes of the Bank, under the law of April 22, 1806, were established by the Emperor, January 16, 1808. See Wolowski as above, *Bulletin des Lois*, and *Moniteur*, January 18, 1808. In Block's *Dictionnaire de l'Administration*, is a detailed account of the organization of the Bank. See also Say, *Dictionniare des Finances*.

became more and more compromising and finally far exceeded in amount the advances made to the commercial public. When, therefore, France was invaded by the allies in the winter of 1813–14, a run by the noteholders began, caused, it is probable, chiefly by the fact that the Bank appeared to have no independent existence of its own, and it again became necessary for three months to limit the amount of the daily redemption of notes to 500,000 francs. Full payment was resumed in April, 1814, but the settlement of the affairs of the Bank was pushed on both sides, until its loans were reduced to less than 3,000,000 francs, and its circulation had fallen from 95,000,000 francs to 15,700,000.[1] The enlarged capital of the Bank had been found, even in the latter years of Napoleon's reign, to be larger than could be used with profit, and the Bank had therefore, as early as 1812, made large purchases of its own stock. These were continued in 1816, until the capital was reduced to 67,900,000 francs, at which point it remained until 1848. Lafitte, who became governor of the Bank under the Restoration, desired to improve the opportunity for general change, by freeing the institution from the interference of the government, and bringing it back to the safe position of an independent bank of discount; but, although his views appear to have been supported by the ministry, no measure

Brought to a low ebb in 1814.

[1] The *Moniteur* for January 31, 1815, contains a report by Lafitte, than provisional governor of the Bank, giving in some detail the operations for the year 1814. For tables giving the leading figures of the accounts of the Bank from 1800 to 1879, see Courtois, *Histoire*, pp. 344, 360.

for carrying them out could be passed, and the imperial decree of 1808, strengthened as we shall see by the action of the Republic in 1848, has continued to be the working constitution of the Bank.

Bourbons and Louis Philippe establish other banks.

The government of the Restoration appears, however, to have adopted the policy of restricting the monopoly of the Bank to the capital. By the decree of 1808 the Bank had been authorized to establish branches *(comptoirs d'escompte)*, subject to approval by the government, plainly with the design of centralizing the banking interests of the Empire under the lead of the great Bank in Paris.[1] Under this decree the establishment of branches in Lyons and Lille was undertaken, although with little success, and one was set in operation at Rouen. The Bourbon government in 1817 and 1818 closed these branches and established independent banks at Rouen, Nantes, and Bordeaux, giving to them the right of emission, and thus reversing the policy of Napoleon. The government of July, following a similar course for a time, established independent banks at Lyons, Marseilles, Lille, Havre, Toulouse, and Orleans, and also authorized the Bank of France to open branches in fifteen other provincial towns and cities, with the monopoly of issue for every place in which a branch was established. Vigorously pursued, this mixed system of branches and of independent banks might easily have been made the means of introducing banking facilities throughout the kingdom, to the great advantage of the country, which has never

[1] *Moniteur*, 28 May, 1808, and *Bulletin des Lois*.

ceased to suffer from the backwardness of its development in this respect. But no strong policy was adopted; the government established new banks for a time with reluctance and under hard conditions, and after 1838 withheld its encouragement altogether; and the Bank of France, opening its branches fitfully and with little regard for public needs, seemed to prefer that affairs should drift.

The revolution of 1848 found in existence, then, the Bank of France, with its fifteen branches, and also nine independent banks of issue. No system of exchanges or of redemption at a common centre had been adopted by the latter; even the branches of the great Bank redeemed each other's notes only at pleasure; so that France felt all the inconveniences of having many issues of notes with but local credit. The suspension of specie payment and the legal-tender power given to the notes of the Bank of France, and to those of the independent banks alike,[1] added to the confusion, and in the spring of 1848 the provisional government finally cut the knot, by making all the independent banks branches of the Bank of France. Their shareholders, in exchange for their old stock, received shares in the Bank, and the capital of the latter was thus raised to 91,250,000 francs.[2] This practically re-established the monopoly in the form in which it had been projected by Napoleon, and although a vigorous discussion of the advantages of freedom in banking has been carried on in France,

The Republic re-establishes the monopoly in 1848.

[1] *Moniteur*, March 16 and 26, 1848, or *Bulletin des Lois*.

[2] *Moniteur*, April 29, 1848, or *Bulletin des Lois*.

all subsequent legislation has tended to strengthen the existing system. The government of Napoleon III. urged the extension of its branches by the Bank, and in 1857 even called for the establishment of one in every department within ten years. The Bank was reluctant, but before 1869 sixty-five branches had been authorized. The republican government in 1873 again applied the spur, and in 1880 all the required branches had been authorized, although a few were not brought into operation until as late as 1882.[1]

Branches of the Bank ill adapted to local wants,

After all, however, it would seem that the branches thus established can fill but imperfectly the place of local banks. A branch of the Bank of France has a capital allotted to it by the Bank, and is then required to carry on its business strictly under the supervision of the latter, and without engaging in any operation with other branches, except by special leave, so that its business, even to the rate of discount, is directed by a policy settled at Paris and not with reference to local wants. It has a board of directors selected by the governor of the Bank, from a list of candidates in some cases made up at Paris and in some by local stockholders, where the latter represent half of the capital allotted to the new branch. The real authority, however, is exercised by a manager appointed by the government, frequently a stranger, and assisted by subordinates sent from the capital. That under such circumstances more than one half of the dis-

[1] The Bank in 1890 had 94 branches and a great number of auxiliary offices, so that in all 258 "places bancables" are now reported.

counts of commercial paper made by the Bank should be made at its branches, as has been the case ever since 1848, is better evidence of the great demand for banking facilities in the provincial towns, than of the success of the present organization in answering this demand.

That the want of such aid from independent banks as a freer system would have given has been seriously felt by the country, appears clear from the measures to which the French government has found itself driven in two periods of political revolution. It has been remarked that from 1814 for many years the Bank of France was the bank of the bankers rather than of the merchants.[1] The position of intermediary between the Bank and the great class of borrowers on a small scale, should have been held by a class of independent banks; it appears, in fact, to have been held by private bankers, and during the revulsion which accompanied the revolution of July, 1830, this class of establishments either disappeared or became inactive, so that a part of the usual machinery of commerce, never adequate, was for a time absolutely wanting, and it seemed impossible for the normal movement to begin again. The Chambers therefore voted that loans should be granted by the government for the relief of commerce to the extent of sixty millions, one half to be lent directly by a public commission, and the other to be used in establishing public discount offices in Paris, and in the departments. The loans were made at four per cent.

and public discount offices necessary in 1830,

[1] Courtois, *Histoire*, p. 156.

and upon security, and the business would seem to have been managed with better success than could have been expected; for of the thirty millions of direct loans, made to industrial establishments and divided between Paris and the departments with tolerable equality, the amount still unpaid in 1870, and then set down as either bad or doubtful, was only about 900,000 francs. The discount office in Paris discounted paper to the amount of 20,629,000 francs, the securities averaging a little less than 560 francs each, and of this not quite two per cent. was still unpaid in 1841. The operations of the ten or more discount offices opened in the departments are not carefully reported.[1]

and from 1848 to 1850.

After the revolution of 1848, which carried down the greater part of the discount houses in Paris, France was again found to be practically destitute of any banking system which could reach the smaller commercial interests, and the government again found itself compelled to establish in haste the machinery needed for such a crisis.[2] By a combination of private capital with public, discount offices were established, in Paris and in the departments, with an organization and powers which made them strongly resemble independent banks, having the state as a shareholder. In sixty-seven cities of France, including Paris, the operations of these discount offices in 1848, 1849, and 1850 were greater

[1] See Courtois, *Histoire*, p. 138, for a valuable notice of these operations.

[2] *Moniteur*, March 8, 1848, or *Bulletin des Lois*. Courtois, *Histoire*, p. 178; *Dictionnaire de l'Economie Politique*, article, "Comptoirs d'Escompte."

in amount than those of the Bank of France for the same years. A considerable number of these offices were allowed to continue their business for several years after the revival of affairs under the Second Empire, and some of them were finally reorganized as banks of discount, repaying to the state its share of the original capital.[1]

At the present day the state of things is so much changed that it is hardly probable that any crisis of affairs would find such a hiatus in the banking organization as existed in 1830 and 1848. The number of independent banks of discount has finally been greatly increased, and this not merely in the great cities, and the Bank of France, as we have seen, now has a branch in every department. Embarrassment might still be caused in some cases by the provision in the statutes of the Bank which requires three signatures upon all paper discounted by it, unless accompanied by certain specified collaterals, this provision tending to bring in some third party between the actual borrower and the Bank; but the agencies for banking now exist throughout the country, and it would only remain to provide for the details of access to them. But for the monopoly of issue given to the Bank, these agencies would probably have existed long ago and would have reached a much higher development than

This necessity not likely to recur.

[1] One of these became the Comptoir d'Escompte of Paris, which, with a capital of 80,000,000 francs, carried on a successful business for many years, but failed disastrously in 1889, upon the collapse of the great copper syndicate, with which it had become involved. Courcelle-Seneuil, *Traité*, p. 187; *Quarterly Journal of Economics*, July, 1889, p. 508.

they have as yet. Deprived of the use of that form of credit which is chiefly in demand in the more remote districts, banking capital has spread itself but slowly, and the privileged institution has found little occasion to exert itself to supply the want, until stimulated by peremptory legislation.

That the Bank of France itself now meets the public wants much more freely than formerly, is clear from the great diminution in the average importance of the securities discounted by it. Before 1830 these securities were on the average not far from 2,500 francs each in amount; from that point they have fallen irregularly, but still with a marked general tendency, until the average now appears to have settled permanently at less than 900 francs.[1] As this change has taken place, notwithstanding an immense increase in the aggregate loans of the Bank and a great rise in the scale of financial operations at Paris as well as at other centres of business, we can only conclude that the Bank now systematically admits to its portfolio, in larger proportion than formerly, the paper coming to it indirectly from traders of the smaller class.

[1] The policy of favoring the small trade of Paris was established by Napoleon in the statutes of the Bank in 1808, where it is provided that "il sera pris des mesures pour que les avantages resultant de l'établissement de la banque se fassent sentir au petit commerce de Paris. . . ." Some of the paper discounted by the Bank in masses for bankers and others is extraordinarily minute. In 1889, out of 5,667,119 pieces discounted in Paris, 19,100 were for 10 francs or less, 836,417 for from 11 to 50 francs, and 1,076,072 from 51 to 100 francs. The proportion of small paper discounted has risen steadily for several years. See, for comparison, a statement as to the size of loans in several parts of the United States, by the Comptroller of the Currency, *Report* for 1880, p. 16.

We have already referred to the suspension of specie payment by the Bank of France in March, 1848. The suspension was authorized, the notes made a legal tender, and the issue of notes as low as 100 francs permitted, on condition that the issues of the Bank, and of all the independent banks soon after consolidated with it, should not exceed 452,000,000 francs. Political and socialist agitation destroyed all commercial confidence and a rapid liquidation went on; the discounts of the Bank fell off, specie flowed in, and in June specie payment was practically resumed, and the legal-tender provision might perhaps have been abrogated with safety, had the Bank been left to itself. The Treasury, however, was embarrassed, the Bank saw few opportunities of using its resources profitably, and advances to a considerable amount were therefore made by it to the government. Partly as a consequence of these advances the limit of the note circulation was raised in December, 1849, to 525,000,000 francs[1]; and the suspension of specie payment was not ended and the legal-tender power of the notes destroyed, until August 6, 1850.[2] By these means, aided by its own great prudence, the Bank not only passed through the gloomy years from 1848 to 1852 without serious loss, but continued when affairs were at their worst to earn a modest profit for its stockholders.[3]

The Bank suspends, March, 1848, to June, 1850.

[1] *Moniteur*, December 23, 1849, or *Bulletin des Lois*.

[2] *Moniteur*, August 13, 1850; *Bulletin des Lois*, T. 166, p. 265.

[3] At the end of 1848 the Bank of France held overdue paper amounting to 85,000,000 francs. Of this 76,000,000 francs were paid in 1849, and subsequent payments soon reduced the balance so that, it is conjectured, the real loss of the Bank from bad debts during the

A great expansion of the business of the Bank began in 1852. The *coup d'état*, which opened the way for a restoration of imperial government, at all events removed political uncertainty. Commercial confidence thereupon revived, and the discounts and advances made by the Bank to individuals rapidly increased, and in 1853 touched a higher point than was ever before known. The Crimean war brought no interruption of this quick growth. The Bank felt its share of the burdens of that period, in the difficulties caused by general financial embarrassments, which forced it to import for its own safety specie to the amount of 800,000,000 francs, at a cost varying from 1⅓ to 1½ per cent.[1]; but it found its compensation in dividends rising in 1856 to 27 per cent. In view of the general expansion it is not surprising that in 1857 the government determined to double the capital of the Bank, raising it to 182,500,000 francs at which it now stands. It is characteristic, however, of the shifty financial policy of that period, that this increase of capital was used as an opportunity for placing a government loan to which the market happened to be unfavorable. The Bank upon raising its 91,250,000 francs of fresh capital was required to invest 100,000,000 francs in new three per cents., issued for the reduction of the floating debt, which had risen to

Its great expansion from 1852,

and increase of capital in 1857.

revolution was not over 500,000 francs, although it charged at the time 4,500,000 francs to profit and loss. Its dividends during 1848, the worst year, were 75 francs on the share of 1000. Courtois, *Histoire*, p. 186, *note*.

[1] Courtois, *Histoire*, p. 222; Tooke, *History of Prices*, vi., p. 85.

an awkward amount.[1] The charter was at the same time extended to 1897, authority was given to issue notes as small as 50 francs, and the government was empowered after 1867 to require the opening of a branch of the Bank in every department. But perhaps the most important of the new features of the charter was the provision made as to the rate of discount. For the greater part of its existence the Bank had striven to maintain the uniform rate of four per cent. The statutes of 1808 had fixed at three months the maximum length of the paper to be admitted to discount, but in periods of difficulty the Bank had sometimes lowered this limit to seventy-five, sixty, and even forty-five days. In 1854, however, it definitely adopted the policy of a variable rate of discount, but then found itself hampered by a law passed in 1807, which made six per cent. the limit of legally chargeable interest. The charter of 1857 freed the Bank by special exemption from this restriction, allowing it to charge whatever rate it may find advisable, with the provision, however, that the profits earned by charging a rate above six per cent. shall not be divided but carried to a permanent surplus.[2]

Adoption of the variable rate of discount.

[1] *Moniteur*, June 11, 1857, or *Bulletin des Lois*. Under this law a share of new stock was given to the holder of a share of old, upon payment of 1100 francs, the par being 1000, and this payment, collected upon 91,250 shares, supplied the 100,000,000 francs required by the government. The stockholders, whose shares were worth 4500 francs June 1st, had the satisfaction of seeing their stock after doubling quoted at 3050 on June 29th. The three per cents. received by the Bank are not to be sold, and now appear among its resources as "Rentes immobilisées (Loi de 9 Juin, 1857) 100,000,000 francs."

[2] This surplus, which is set down in the published accounts as

The years from 1857 to 1870, although marked by great changes, both in the political world and the financial, hardly witnessed any event in the history of the Bank of France which needs to be noticed here.[1] But with the opening of the Franco-German war in July, 1870, the Bank entered upon the most remarkable period of its existence,—that in which its vicissitudes were most startling and critical, its services to the country most distinguished, and the success of its management most brilliant.

The war with Germany in 1870.

Three weeks before the breaking out of hostilities the Bank of France had in its vaults an amount of cash almost equal to its notes, and amounting to nearly two thirds of all its cash liabilities.[2] The approach of war caused a heavy pressure upon the Bank for loans, and both notes and specie were

"Bénéfices en addition au capital (art. 7, Loi de 9 Juin, 1857)" has stood at 8,002,314 francs since 1874.

[1] Perhaps an exception should be made of the unexpected claim set up by the Bank of Savoy in 1864, which for a moment seemed to threaten the monopoly of the Bank of France. The Bank of Savoy had by its old statutes the right to issue notes and to establish branches; the treaty of annexation saved all existing rights of corporations in the annexed territory; and on this reasoning it was proposed to raise the capital of the Bank of Savoy from 4,000,000 francs to 40,000,000 francs, to open branches and issue notes. The project was favored by many opponents of the monopoly of note issue, and was formidable enough to lead the Bank of France to make the payment of 4,000,000 francs for the surrender of the asserted rights. For notices of this episode see Courtois, *Histoire*, p. 245; *Economist*, January 16, 1864; D'Eichthal, *Monnaie de Papier et Banques d'Émission*, p. 84.

[2] The chief movements in the account of the Bank of France, caused by the war, can be seen in the following table, given in millions and tenths:

drawn from it in large amounts, and began to find their way either into private hoards or into foreign hands. Neither the government nor the public could see with patience this dispersion of a stock of specie which, it was felt, might be an important resource in the desperate struggle with Germany, and suspension of payment as a precautionary step thus became probable early in August. Shortly afterward the government resolved upon the adoption of a measure suspending the collection of commercial obligations, and this made the suspension of the Bank a necessity. On the 12th of August, then, four weeks from the beginning of the war, a law was passed, as a government measure, and with but one dissenting vote in each house,[1] authorizing the Bank to refuse payment of its notes in specie, and for the second time in its history making its notes a legal tender for debts public and private. The issue was at the same time limited to 1,800,000,000 francs, and authority was given for the emission of notes as small as 25 francs each. On the next day, August 13th, was passed the first of the measures which postponed all com-

Suspension authorized, Aug. 12, 1870.

	Notes.	*Deposits.*	*Cash.*	*Disc'd Paper.*	*Public Loans.*
1870, June 23 . .	1,374.	431.9	1,318.5	558.1	
Aug. 11 . .	1,583.6	582.2	1,028.6	1,181.7	
Sept. 8 . .	1,745.	441.8	808.	1,428.3	
1871, June 29 . .	2,213.	524.1	549.8	741.9	1,403

June 23d was the day when the cash was at its maximum for 1870; August 11th was the day before the suspension; no account was published between September 8, 1870, and June 29, 1871.

[1] In the Senate the solitary negative vote was given by Michel Chevalier. For the laws noticed in the text see *Journal Officiel*, 1870, Aug. 13, 14, 15, or *Bulletin des Lois*.

mercial debts for one month, and then, by successive extensions of time, until July, 1871, without other burden to the debtor than liability for interest until the final payment.[1] And finally, on the 14th of August, the limit of issues by the Bank was raised to 2,400,000,000 francs, on the ground that for the Bank to continue its discounts it must have a wider margin than was allowed by the law of the 12th. This completed the series of measures under the authority of which the Bank was administered during the war.

Loans made to the government.

The state had at the outbreak of the war obtained a small advance from the Bank, and called for others soon after the suspension. During the siege of Paris the branch of the Bank at Tours became the agency by which considerable advances were made to the provisional government at Tours, while the Bank itself was in like manner aiding the government in Paris. When the war with the Commune succeeded that with Germany, these advances had risen in all to 761,000,000 francs, besides a loan of 210,000,000 francs to the city of Paris. The Bank resisted with great difficulty the efforts of the Commune to use its resources in defence of the city, and for several weeks escape from open pillage, or from demands not to be distinguished from it, seemed hopeless. The prudence of the managers, the devotion of their subordinates, and

[1] Under the operation of this law the Bank of France held suspended paper to the amount of nearly 870,000,000 francs. Of this more than two thirds was paid in before the expiration of the legal term of indulgence; and of principal and interest less than one per cent. wass till unpaid at the end of 1874. Courtois, *Histoire*, p. 263.

the steady support of one or two members of the revolutionary body itself, carried the Bank safely through the most dangerous episode of its history, and enabled it, upon the suppression of the Commune, once more to give its aid freely to the government.[1] In July, 1871, the loans thus made to the state amounted in all to 1,425,000,000 francs, and the government now happily found itself in such a position that it could cease drawing from this source.[2]

The brief statement given on p. 123 shows distinctly enough the change which a year of war had wrought in the affairs of the Bank. An enormous loan had been made to the state simultaneously with an increase of discounts for individuals, and this had been effected partly by the sacrifice of cash and partly by an increase of notes, the volume of which now stood nearly 800,000,000 francs above the highest point ever before reached. This increase of notes had been managed with great caution, so that while it necessarily expelled from circulation a considerable amount of specie, it had nevertheless brought about but a slight depreciation of the paper[3]; and with the repayment by the government of the advances made to it by the Bank, the restoration of specie payment

Little depreciation of the bank-notes.

[1] For minute details of the history of the Bank under the Commune, and of the means by which it was saved, see Du Camp, *Les Convulsions de Paris*, iii., ch. ii.

[2] In the *Bulletin de Statistique et de Législation Comparée* for April and May, 1880, is a careful report upon these loans and upon their subsequent payment.

[3] During the war quotations were made of exchange on London and occasionally of gold, indicating in one extraordinary case a premium

promised to be easy. The government, however, was for the time in no condition to undertake the payment of a domestic debt. It had before it the problem of paying to Germany, in the next two or three years, the great indemnity of five thousand millions of francs, to which it was bound by the treaty of peace; it had yet to learn how far its credit would enable it to make this payment by borrowing in the general market, and the most that could be hoped was that it should not have to call upon the Bank for further aid. The latter could not expect, therefore, for several years to come, to extricate the resources which it had lent to the state.

But while the Bank thus saw its resources unavailable for a movement towards specie payments, it was also called upon to increase at once the assistance given by it to commerce. It was of paramount necessity that productive industry should resume its activity without delay, for it was after all in the production of wealth and its proper use that France must find the means of escape from the economic misery caused by the war, and it was the thrift and prosperity of individuals that must support the credit, on which the country now relied in making its settlement with Germany. Special precaution was needed also to insure industry from being starved of

of four per cent. on specie. After the restoration of order gold ceased to be quoted, and the price of exchange on London fell to a level of about 1 per cent. premium. See the *Economist* for quotations both in London and in Paris. Leon Say's *Rapport sur le Payement de l'Indemnité de la Guerre* gives a chart showing the rates of exchange in Paris on London from June, 1871, to September, 1873.

its needed supplies of capital, while the government was borrowing the vast sum to be paid to Germany. The Bank therefore took the bold course of rapidly enlarging its discounts and advances to individuals; and to make this possible, in a country where deposit accounts and checks are but little used, it was authorized in December, 1871, to increase its issue of notes to not more than 2,800,000,000 francs,[1] and in July, 1872, the limit was further extended to 3,200,000,000.[2] Such an increase of paper with a forced circulation required, as the condition of possible safety from serious deprecation, a further expulsion of specie from use. The smallest notes thus far issued by the Bank were notes for 20 francs authorized by a law of December, 1870; but the law of December, 1871, raising the limit of the total issue of notes, now authorized the issue of notes as low as 5 francs, and thus facilitated the introduction of the bank paper into all the channels of circulation, small as well as great.

Increase of issues and of loans, after peace,

With the ground thus prepared, the great scheme for the simultaneous payment of Germany and revival of France was carried through. The government borrowed in all the markets of Europe, including that of Germany, but called upon the Bank of France for nothing more than two or three temporary advances, not large in amount and soon repaid. The Bank doubled

to facilitate payment of indemnity to Germany.

[1] *Journal Officiel*, 1871, p. 5373; *Bulletin des Lois*, T. 253, p. 504.

[2] *Journal Officiel*, 1872, p. 4969; *Bulletin des Lois*, T. 257, p. 39. The provision is contained in article 4 of the law for a national loan of three milliards, and declares that "le chiffre des émissions desbillets . . . est élevé provisoirement à trois milliards deux cents millions."

its discounts of commercial paper for the next three years, and for this purpose increased the note circulation until at its maximum at the end of October, 1873, it nearly reached 3,072,000,000 francs. From the data subsequently published it appears that the whole of the increase was made by the issue of notes of not above 100 francs, and the greater part of it by means of notes of 50 francs and less.[1] The risks of the operation were amply compensated by its gains. Although the government, in view of the valuable privilege enjoyed by the Bank of making a great issue of notes without the obligation of payment, reduced to one per cent. the interest on its own debt to the Bank, the profits from the immense increase of discounts were heavy. A dividend of 20 per cent. for the second half of 1871, 32 per cent. for 1872, and 35 per cent. for 1873, amply justified the conduct of the management in the eyes of stockholders, and once more proved that in periods of specie suspension no trade flourishes like that of the dealers in credit.

The government was able in 1872 to begin its payment to the Bank at the rate of 200,000,000 francs per year; the payment of the indemnity to Germany was completed in August, 1873, and in 1874 the Bank began its preparations for the resumption of specie payment. France, having a less expanded state of credit than most other commercial countries, had felt the revul-

Preparations for resumption begin, 1874.

[1] *Economist* for 1872, p. 326; *the same* for 1874, p. 320.

In the *Bulletin de Statistique* for May, 1887, p. 510, is a table of the annual maximum and minimum circulation of every denomination of notes, and of the annual aggregates, from 1866 to 1886.

sion of 1873 but little, and it was, therefore, possible to make a large reduction in the discounts of the Bank, and thus to carry on the double operation of accumulating specie and withdrawing notes. The withdrawal of small notes of 25 francs and less was carried on even faster than the general reduction of the circulation, in order to force the introduction of specie into general use and thus to insure the presence of a large mass of metal in the hands of the public before the Bank should begin its payments. The specie in the Bank reached its highest point in June, 1877, when it stood at 2,281,000,000 francs, showing an accumulation by the Bank of over 1,500,000,000 francs in three years and a half, independently of any made by the public. Of this specie, not far from sixty per cent. was gold, it being the policy of the Bank to hold much gold, partly because gold alone could answer demands for use in foreign trade, and partly because of the uncertainty which obscured the future value of silver.[1]

[1] In the *Bulletin de Statistique* for January, 1887, p. 60, is a table showing the annual maximum and minimum of specie in the Bank of France, distinguishing gold and silver, from 1811 to 1886.

It has often been said that for a few years before 1879 the great nations were "grasping for gold," in a momentary panic caused by the introduction of the gold standard in Germany. A little examination will show, however, that the great demands for gold by Germany, France, and the United States came in succession and not simultaneously, and were met without disturbance. While the French accumulation was going on in the years 1874 to 1877 inclusive, that sensitive barometer, the Bank of England rate, averaged 3⅛ per cent. During the four years it rose but once as high as 6, and then for only 38 days, and was above 4 for only 124 days altogether. These low rates are not observed when nations are "grasping" for specie.

The precise period at which specie payments should be resumed was determined by the law of August 3, 1875, in which it was provided that when the advances made by the Bank to the State should have been reduced to 300,000,000 francs, payment of the notes in specie should begin.[1] By the end of 1876 only 338,000,000 francs remained unpaid, and it would not have been difficult at any time in 1877 to complete the operation. The year was permitted to pass, however, without taking the final step, the Bank in the meantime dealing upon the specie basis. A payment of 10,000,000 francs, which lowered the government debt to the required point, was at last made *pro forma* December 31, 1877,[2] and specie payment was resumed with the opening of the new year, without shock and without much thought on the part of the public. By the terms of the law the notes continued to be a legal tender for all debts, as they are to-day, but their forced circulation by non-payment was at an end. It is also to be observed that as the law for resumption did not disturb the previous legislation which had fixed the limit of note circulation for the Bank at 3,200,000,000 francs, the Bank of France, for the first time in its history, has the function, when paying in specie, of issuing a legal-tender paper of limited quantity.[3]

Resumption effected easily, Jan. 1, 1878.

[1] See article 28 of the Budget for 1876, in *Journal Officiel*, 1875, p. 6866 ; also *Bulletin des Lois*.

[2] The final installment of the debt was paid March 14, 1879. See the *Bulletin de Statistique*, cited above on page 125.

[3] The limit of circulation was raised to 3,500,000,000 francs, by article 8 of the Budget Act of 1884. *Bulletin des Lois*.

At the moment of resumption the notes of the Bank remaining in circulation amounted to nearly 2,462,000,000 francs. This was a heavy reduction from the maximum reached in 1873, but it was still nearly double the usual circulation for the years before the war. The free choice between specie and paper after resumption led to but little diminution of the issues, so that as the result France may be said to have adopted a permanently larger paper circulation. In part this is no doubt due to a considerable expansion of affairs, calling for an ampler circulating medium; but in still greater part it is no doubt the effect of a change of habit generally produced by any protracted use of forced paper,—a change which makes it highly improbable that any nation, after such an experience, will easily return to the use of paper and coin in the same proportions which it once found satisfactory.

CHAPTER IX.

THE NATIONAL BANKS OF THE UNITED STATES.

ADVANCING from the simplest type of the modern bank of issue, represented by the Bank of France, we come to the case where the government seeks to protect the circulating notes of the bank, by requiring the pledge of property for their redemption. Of this system, the National Banks of the United States are the best representatives. The legislation which establishes them prescribes many details of administration, and unforeseen circumstances have checked the natural development of their circulation; but they present the system of secured currency in its least complex form and under circumstances which have given it great historical importance.

The best type of secured issue.

The national banking system owes its existence to the civil war. Although in the majority of the States the banks incorporated under State authority were badly organized and insecure, and although even such as were on a solid foundation could enjoy only a restricted local credit, the current of opinion before the war was by no means favorable to any consolidation of banking interests. Discontent with existing systems more frequently took the form of

opposition to the existence of any banks of issue at all; the party then apparently holding permanent control of the national administration cherished with pride the traditions of its victorious struggle with the United States Bank, and of its devotion to a gold currency; and probably neither the friends nor the opponents of banking would have thought at that time of finding in the government of the United States a power able to reorganize upon a common plan the note issues of all the States.

The imperious necessity of finding a market for United States bonds for the supply of a Treasury drained by war was the favoring condition needed for such a reorganization, and the assumption of unusual powers by the United States government, which was becoming habitual under the pressure of a struggle for existence, made the resort to federal authority practicable. In 1860 a majority of the people would have thought the establishment of a third United States bank dangerous and of doubtful constitutionality. In 1863 a system of national banks, indefinitely more powerful than the bank which waged an almost equal war with Jackson, established with widespread, although not unanimous, consent, and without solid opposition, except from some existing interests threatened or alarmed by the change. It was, indeed, urged by some that as the wants of the Treasury were the real controlling motive in the establishment of the new system, it would be better for the government to issue its own notes to the extent of the proposed bank circulation, and to occupy the whole of the field, of which

it had already taken a part, and so enjoy the full advantage of a non-interest-bearing debt. Fortunately these views gained little support, and the dangerous expedient of obtaining funds by the issue of government notes was not pushed beyond the limit of possible return to specie payment.[1]

Adoption of the system, Feb. 25, 1863.

The adoption of a system of national banks, having their notes secured by the deposit of United States bonds, had been proposed by the Secretary of the Treasury in 1861, and strongly urged by him in 1862. An act for the purpose was passed in February, 1863,[2] but in many points of detail this proved to be so unsatisfactory and incomplete, that only 134 banks were organized under it in the next nine months and the number had risen to less than 450 in sixteen months. A revised act, making important changes, was therefore passed in June, 1864,[3] and ample provision having been made, under which banks chartered by the States could be reorganized as national banks, the extension of the new system went on rapidly. Its adoption was further stimulated by an act laying a tax of ten per cent. on all notes of State banks paid out by any bank after July 1, 1866.[4] The certainty of the practical exclusion of all State banks from the field of circulation, caused the speedy reorganization of the greater part of them as national banks; and thus

[1] See *Report on the National Bank Currency Act*, written by the late John E. Williams, and made to the New York Clearing-House banks, November 28, 1863.

[2] 12 *Statutes at Large*, 665.

[3] 13 *Statutes at Large*, 99.

[4] 13 *Ibid*, 484.

the national system, numbering 1,634 banks on July 1, 1866, at once assumed the pre-eminence which it has easily maintained.

There is no doubt that, in adopting the national bank system, Congress understood that it was establishing the agency by which the sole paper currency of the country should be issued in the future. The legal-tender issues were still regarded as a temporary expedient, resting upon the overwhelming exigency of the moment for their justification; the bank act is entitled "An act to provide a national currency," emphasizing by its title the permanence of the substitute which was to fill the place left vacant when the legal-tender notes should be paid; and the text of the act plainly looks forward to the return of specie payment, which should leave specie the only tender for debt.[1] Establishing a permanent system of banks, Congress undertook to surround them by the ordinary safeguards needful to give them full credit, providing minutely for their organization and superintendence, and for the publication of their accounts at rather short inter-

Intended finally to supply the sole paper currency.

General safeguards,

[1] In 1870, when the return to specie payments finally seemed to have been postponed indefinitely, an act was passed authorizing the establishment of gold banks, issuing notes redeemable in gold coin, and secured by the deposit of "United States bonds bearing interest payable in gold" with the treasurer of the United States. The notes were not to exceed eighty per cent. of the value of the bonds, and were not to be subject to those provisions of law which then limited the aggregate circulation of bank-notes. Several gold banks were organized, chiefly in the Pacific States; but after the return to specie payments, the distinction between the gold banks and others ceasing to be of importance, provision was made by the act of 1880 for their

vals,[1] and laying down rules, wholesome so far as they go, restricting the kinds of business in which the banks should engage. It was provided also that the shareholders should be responsible ratably for the debts of the banks, each to the amount of his stock in addition to the capital actually invested by him.[2]

A system of banks thus guarded and under the charge of the government itself could hardly be treated by Congress as unworthy of being entrusted with the public funds, as the State banks had been under the Independent Treasury Act of 1846, and provision was therefore made for designating banks as depositories of public money when occasion should require, and for their employment as financial agents of the government, upon their giving satisfactory security, by the deposit of United States bonds and otherwise, for the faithful discharge of these functions. The framers of the measure no doubt looked forward at one time to a more consolidated system of banks, and to a closer intimacy with the government

and public functions of the banks.

conversion into national banks of the usual type, and there are now no national gold banks in existence. 21 *Statutes at Large*, 66. *Comptroller's Report*, 1890, p. 53.

[1] A summary statement of the number and condition of the national banks, at five dates in every year, and for every year since the adoption of the system, is given annually in the *Report* of the Comptroller of the Currency.

[2] From this liability to contribution beyond the amount invested, the law made an exception in favor of the stockholders of any existing State bank, having a capital of not less than five millions and a surplus of twenty per cent., in case of its reorganization as a national bank. This exception was made in order to secure the adhesion of the Bank of Commerce of New York City,—the only bank in the United States which could meet these conditions.

than was in fact established; but their action as it stands marks an extraordinary change of policy, made under the pressure of war, by a government which, hardly more than two years before, trusted no agency whatever with the custody of its funds, recognized no medium of payment except specie, and carefully disclaimed all connection with, or responsibility for, any possible system of banks.

The general provisions of the national banking system[1] have for their starting-point the restriction of the right of note-issue to national banks, the other functions of banking being left free for banks chartered by State authority, and for private banks. Any national bank, proposing to issue notes, is required to secure them by a deposit of registered bonds of the United States, the bonds being transferred to and held by the Treasurer at Washington, but the interest thereon collected by the bank, whose property the bonds continue to be. The deposit of bonds under these provisions entitles the bank making such deposit to receive from the Comptroller of the Currency, who has the general charge of the system, notes to the amount of ninety per cent. of the

The method of securing the notes.

[1] The legislation on this subject down to 1873 is embodied in §§ 5133–5243 of the *Revised Statutes* of 1878. The subsequent acts of importance are the Compromise act of 1874, 18 *Statutes at Large*, 123; the Resumption act of 1875, *Ibid.*, 296; the act of 1880 concerning gold banks, 21 *Id.*, 66; the act of 1882 extending the existence of the banks, 22 *Id.*, 162; the act of 1887 providing for a class of central reserve cities, 24 *Id.*, 559; and the silver-bullion act of 1890, making further provision as to the redemption of bank-notes, 26 *Id.*, 289.

market value of the bonds deposited, but not exceeding ninety per cent. of their par value. These notes when received are in blank, certifying only the fact that the security for them is in the hands of the government; but when signed by the proper officers of the bank, they become its promises to pay upon demand, and can then be issued for circulation. The effect of this arrangement, it will be seen, is simply that a sufficient amount of the property of the bank, required to be held in the form of bonds, is pledged with proper safeguards to insure the ultimate payment of all notes issued by the bank. The notes are also, of course, to be paid by the issuing bank whenever presented, are to be received in payment by all other national banks, and can be paid to or be used in payments by the government in all cases where specie is not required by law; but they have never been a legal tender as between individuals.

These provisions have secured for the notes a uniform value and give to those of every bank an unimpeded circulation in every part of the Union. If, indeed, the law, as in the act of 1863, still made no further provision for redemption than to require every bank to redeem its own notes when presented at its own counter, the return of notes for payment would rarely take place and their substantial convertibility would be nearly destroyed. But the law of 1864 made provision for redemption by all banks at agencies in the principal cities, and this arrangement continued in force until June, 1874,[1] when the present system was adopted, making the Treasury of the United States

Provisions for central redemption.

[1] 18 *Statutes at Large*, 123.

the sole redeeming agency for all of the national banks, and requiring every bank to maintain in the Treasury, to be used in redemption of its notes, a reserve equal to five per cent. of its circulation. Thus far, however, the chief effect of the present system of redemption, except in the case of insolvent banks or of banks reducing their issues, has been the easy removal from circulation of notes which are worn, soiled, or otherwise unfit for use. For the establishment of a system which should test effectively and continuously the power of every bank to convert its notes into specie on demand, it would probably be necessary to require that no national bank should pay out any notes except its own.[1] For the general purpose of maintaining the convertibility of the aggregate note-issue of the banks and its ready diminution when required by the condition of business, the present arrangement is well devised.

The national bank-note when issued is the promise of the issuing bank, and must be punctually met by it, when payment is required, as any other liability must be. The note, however, now carries with it certain engagements binding upon the government of the United States. The provision for redemption at the Treasury binds the government to pay on demand all notes when presented in due form, and not merely notes to the extent of the reserve. And in case of

The government's liability for the notes.

[1] Such a prohibition was the basis on which the "Suffolk bank system" of New England rested, from 1819 to 1866, and maintained at par a note-circulation which had otherwise but slender provision for convertibility. Massachusetts *General Statutes* of 1860, ch. 57, § 55; but compare also § 124. And see D. R. Whitney, *The Suffolk Bank*.

the failure of a bank, the law provides for the immediate redemption of all its notes at the Treasury. The government has thus made itself fully liable in any event for the whole amount of the notes. On the other hand, it has taken ample security for its reimbursement, by requiring the deposit of bonds as above stated; by requiring that this deposit shall be increased if the value of the bonds declines, by the provision for a reserve of cash to be held by the Treasury, and also by taking for itself a first lien upon all the assets of a bank and upon the personal liability of the stockholders, for the purpose of making good any possible deficiency in the security already provided. An ingenious provision in the act of 1882 also secures for the government any gain that may ultimately accrue from the destruction of notes while outstanding, or from the failure of holders to call for their redemption. And finally, although the expenses of printing the notes, (but not of engraving the plates), of superintending the system, and of providing for the safe-keeping of the bonds deposited, are paid by the government, these charges are offset by a tax of one per cent. per annum on the average amount of notes in circulation. On the whole, therefore, whatever may be gained by the banks from this system, it cannot be said that the liability of the government is onerous.

Although in its general theory the national banking system is one of "free banking," under which the business of banking in all its branches shall be open to all persons who comply with the formalities provided by the law, it was nevertheless felt to be dan-

gerous to allow the issue of an unlimited circulation so long as the currency remained irredeemable. The attempt to restrict what was in theory free led, therefore, to a series of contradictory and in some respects remarkable provisions.

Original limitation of note-issues.

Without restricting the establishment of banks, the acts of 1863 and 1864 limited the aggregate amount of notes to $300,000,000; and while no bank was allowed to issue notes exceeding in amount its capital stock, every bank was required to deposit bonds amounting to at least one third of its capital. Apprehending that the rapid reorganization of the numerous State banks in the Eastern and Middle States might fill up the prescribed aggregate of circulation, before the West should be able to organize a due proportion of banking capital, the act of 1863 also required one half of the total circulation to be apportioned among the States according to their representative population, allowing the other half to be allotted "having due regard to the existing bank-capital and resources." The reluctance of the banks to reorganize as national banks, however, caused the omission of this provision in the act of 1864; but Congress in 1865, although encouraging the immediate reorganization of existing banks, revived the provisions for apportioning the aggregate circulation and fixed a narrower limit for that of banks of the larger class.

As early as November, 1868, notes had been issued to nearly the amount allowed by law, and the West and South began to complain of the difficulty of organizing banks, without the right of issue, in

sparsely settled States. In 1870 a chance was offered for the increase of bank-notes without increase of the aggregate paper currency of the country, by the contemplated payment of certain obligations of the Treasury hitherto used by the banks as a part of their reserves, for which legal-tender notes would now have to be substituted and thus withdrawn from circulation. Congress therefore seized the opportunity of extending the aggregate limit of notes for circulation, and authorized $54,000,000 to be apportioned among States having less than their due proportion, and further required that, after this increase of note circulation should have been effected, a redistribution of the right of issue should be made, by the withdrawal, to the extent of $25,000,000, from States having more than their due proportion, and by the apportionment of the same among States having less. The limit for each bank thereafter organized was reduced to half a million dollars, and provision was even made for allowing the removal of existing banks to States having less than their due proportion of note circulation.

Efforts to apportion the issues,

By the end of 1873 the new limit of $354,000,000 was nearly filled; and finding itself impelled to legislate upon the currency by the financial revulsion of that year, Congress after painful debate elaborated the Compromise Act of June, 1874, in which provision was made for the immediate withdrawal of circulation from States having an excess and its distribution among banks in States having a deficiency, as fast as application should be made by the latter, to

the extent of $55,000,000, including the $25,000,000 already provided for. Arrangements for carrying this act into execution, however, had hardly been made, when this series of crude and futile measures was brought to an abrupt close, by the hasty passage of the act of January, 1875, for the resumption of specie payments. This act fortunately swept away all the provisions limiting and apportioning the aggregate amount of bank-notes to be authorized, as well as those calling for the withdrawal and redistribution of issues already authorized, and thus established the national banks for the first time on the basis of freedom, required by the theory of the original measure. No further change was needed to adapt the system to specie payments, its details having been arranged at the outset so as to admit of easy translation into terms of specie.

ended by the Resumption Act of 1875.

In its regulation of the discount and deposit business of the national banks, the law does not follow the example of some previous legislation, by fixing a limit to the amount of securities to be held by any bank,[1] but simply prescribes a minimum reserve to be held for the protection of the liability for deposits. For banks in the "reserve cities," named in the original act of Congress or provided for by later legislation,[2] the reserve must

Provisions as to reserve.

[1] See *e. g.* Massachusetts *General Statutes* of 1860, c. 57, § 25; New York *Revised Statutes* of 1859, ii., 518; Maine *Revised Statutes* of 1857, ch. 47, § 19.

[2] The reserve cities are Boston, Albany, New York, Brooklyn, Philadelphia, Pittsburgh, Baltimore, Washington, New Orleans, Louisville, Cincinnati, Cleveland, Detroit, Chicago, Milwaukee, St.

be twenty-five per cent. of the deposits; for all other banks, fifteen per cent. The provisions for determining what shall be counted as reserve are, however, less simple. The general requirement is that the reserve shall be "lawful money," or in other words specie or legal-tender notes of the United States, so long as a paper legal tender exists. But Clearing-House certificates, which represent lawful money specially deposited for the purposes of the Clearing-House association, of which the bank owning them may be a member, and the cash reserve of five per cent. of its circulation, which every bank is required to keep in the Treasury, are also to be counted as a part of the reserve against deposits. And it is further provided that, for any bank in a reserve city one half of its reserve may consist of cash deposits in the city of New York, or in any other "central reserve city,"[1] and for any bank outside of the reserve cities three fifths of its reserve may in like manner consist of deposits with banks in those cities.

The permission thus given, to count as cash these deposits, which are, in fact, only demands for cash, has a marked effect upon the composition of the

Paul, Minneapolis, St. Louis, Kansas City, St. Joseph, Omaha, and San Francisco. The list included Leavenworth, until the passage of the act of March 1, 1872. Any city having 50,000 inhabitants can now be made a reserve city, upon application made by three fourths of the national banks established in it. 24 *Statutes at Large*, 559.

[1] By an act of 1887, a city having 200,000 inhabitants can be made a central reserve city, upon application made by three fourths of the national banks established in it. 24 *Statutes at Large*, 559. In December, 1890, the central reserve cities were New York, Chicago, and St. Louis.

reserve held by the banks as an aggregate, and therefore upon the strength of the whole mass of banks at any given moment. If we take the returns of the national banks for October 2, 1890, we find their deposits amounting in the aggregate to 1,758.7 millions of dollars, requiring a reserve of 353.7 millions. They are returned as holding 478.2 millions of reserve in all, and were, therefore, on the average, far above the legal minimum. But this great apparent reserve was composed as follows:

Specie	$195.9 millions.
Other lawful money . . .	86.8 "
Redemption fund	6.1 "
Due from agents	189.5 "
Total	$478.2+

Of actual cash, then, the banks of the country at this date held but 282.7 millions, much less than the amount of reserve required for their liabilities,—the remaining sum, which apparently made their condition remarkably strong, consisting chiefly of debts due from one bank to another. The ability of the mass of banks, therefore, to meet the pressure of a financial crisis was dependent on the ability of the debtor banks, to pay upon demand the sums deposited with them and relied upon by the others as a part of their reserve, or in other words, on the ability of the banks of New York City to meet their demand liabilities. The reserve of those banks, however, on which all the others rested, was but little above the legal minimum at the date named, and sometimes under

Concentration of risks at New York.

similar conditions has been below that point, so that with an apparently high reserve for the country at large, there was such weakness at the central and most exposed point as to impair seriously the value of this precaution.[1]

The relation of the New York banks to the other banks of the country, as the depository of their reserves,[2] is plainly quite analogous to that of the Bank of England as the depository of the joint-stock and private banks of London, and the effects seen in the weakening of reserves and the concentration of risks are the same in both cases.[3] As regards the national banks, the tendency to centralize the reserves, favored by the law, is heightened by the practice, long established among the New York banks and also existing elsewhere, of inviting de-

[1] The reserve October 2, 1890, was divided between city and country, and classified as follows, in millions:

			Classification of Reserve.			
	Reserve required.	*Reserve held.*	*Specie.*	*Legal Tender, etc.*	*5 p'r c't fund.*	*Due from agents.*
New York City	$83.2	$92.5	$78.4	$13.9	$ .2	$ —
Other Res. cities	141.6	160.2	63.2	35.2	.7	61.
Country . .	128.9	225.5	54.3	37.7	5.2	128.5
Totals . .	$353.7	$478.2	$195.9	$86.8	$6.1	$189.5

The published reports make it probable, although not certain, that in the middle of October, 1873, when the reserves of the New York banks had fallen to less than eleven per cent. of their liabilities, and payments had been generally suspended, the reserves of the rest of the country were above the line required by law.

[2] The central position of New York is not seriously affected by the conversion of Chicago and St. Louis into central reserve cities, under the act of 1887.

[3] See Bagehot's *Lombard Street*, pp. 160–173; Dun's *British Banking Statistics*, p. 129.

posits from country banks by the payment of interest.[1] The opportunity of converting a barren reserve into an interest-bearing resource, and yet counting it as reserve, has always been attractive, and has caused an habitual transfer from the country banks to those of New York, sometimes estimated at not far from $80,000,000. The employment given to the funds thus held subject to call is a topic of serious interest on which it is impossible to enter now.

Enforcement of provisions for reserve.

For the enforcement of the provisions as to reserve, the law provides that whenever the reserve of any bank falls below the prescribed limit, the bank shall neither "increase its liabilities by making any new loans or discounts," otherwise than by the purchase of sight bills of exchange, nor shall it make any dividend, until the reserve has been restored to its due proportion. The Comptroller of the Currency is also authorized to notify any bank whose reserve is insufficient that it must be made good, and in case of failure to comply within thirty days, he may, with the concurrence of the Secretary of the Treasury, appoint a receiver to wind up the business of the bank. Although the ample discretion thus given to the Comptroller has been used with moderation,[2] the prohibition of further

[1] This practice was condemned by resolution by the banks of the New York Clearing House in 1857, 1873, and 1884. See *Banker's Magazine*, April, 1858, p. 822; *Commercial and Financial Chronicle*, November, 1873, p. 651; *Banker's Magazine*, August, 1884, p. 129. Resolutions alone, however, have never proved to be a cure.

[2] See the course pursued in September and October, 1873, when the reserve of the banks of New York were far below the line, and both city and country banks had suspended payment.

discounts, when the reserve falls below a given point, makes a hard and fast line, the approach to which never fails to cause uneasiness, and in some conditions of affairs is viewed with great alarm. In any actual crisis, the declaration that, in a given contingency like this, the usual accommodation of the public must stop and liquidation must begin, is the surest means of increasing the pressure for loans and of thus converting a crisis into a panic. For ease in operation and greater safety, some more elastic provision is needed, which shall insure a sufficiently high average of reserve and yet threaten no harsh break in operations at a given point. The Bank of England has in its hands a superior instrument for this purpose in a sliding scale of discount, by which it can encourage or discourage borrowers and thus deplete or replenish its reserve, without ceasing its operations altogether at any point yet reached. This expedient, however, is less applicable in the United States, partly because of a traditional prejudice against the adjustment of rates of discount by the demand in the market, widely prevalent among our people, and partly because Congress has been obliged by probable lack of authority to forego the establishment of a general law respecting interest, and to recognize in every State the rates there prescribed by the local legislature. A suggestion of an elastic limit is contained in certain provisions of the German bank law, which, beyond a prescribed line, tax all operations, without prohibiting them;[1] but this expedient,

[1] See *below*, chapter xi. Also Jevons, *Money and the Mechanism of Exchange*, p. 226.

devised long after the establishment of the national banking system by Congress, has not yet had such trial as to test its capabilities thoroughly.

Much controversy has been excited by the question as to the rate of profits which the national banks have obtained from their right of issuing notes secured by a deposit of bonds. It follows from what has been shown in the preceding chapters, that their case is in no respect different as regards profits from that of banks which use their credit in the form of deposits, in order to make investments in interest-bearing securities. The notion often entertained, that the national banks have some peculiar opportunity of making a double profit, "by receiving both interest earned by their bonds, and interest earned by the loan of the notes issued upon the bonds," overlooks the fact that every bank uses, as its means for obtaining securities, its capital and whatever credit it can employ in addition.[1] Every bank, then, as a consequence of its use of its credit in any form, must receive interest earned by the investment of its capital and also interest earned by what we may call the investment of its credit; and the fact that the national banks, like others, have the opportunity

Supposed extraordinary profits from circulation,

[1] As a great number of state banks of issue were converted into national banks, a comparison of the accounts of any such bank, before its conversion and after, is easily made, and will show that the deposit of a part of its property at Washington gave it no source of profit which it did not enjoy before. The actual profit earned by the banks from their right of circulation was estimated by the Comptroller of the Currency in 1883 not to exceed $46 on $90,000 of notes. See *Comptroller's Report*, 1883, p. 13.

for making credit as well as capital yield a profit, neither springs from the system on which their notes are secured, nor depends upon it. Indeed, it must be manifest that their deposits yield them a profit in precisely the same way as their notes, and usually much greater in amount. The conclusive practical answer to the idea of a supposed extraordinary profit is to be found, however, in the conduct of the banks themselves, especially since the passage of the act of 1874, already referred to. That act, recognizing the desire of many banks to reduce their circulation and secure possession of their bonds, provided that any bank might deposit "lawful money" with the Treasurer of the United States to enable him to redeem its notes, and thereupon withdraw *pro tanto* the bonds deposited, provided the amount of its bonds left in deposit were not reduced below $50,000.[1] Several important national banks had never chosen to issue notes, although required by the law to maintain a deposit of bonds; under this provision a considerable number of others reduced their notes to the $45,000 which the required minimum deposit of bonds would support.[2] The withdrawals of notes continued for several years, and although new banks were formed and the note circulation increased in some sections, under the

not to be reconciled with facts.

[1] For an objection made at the Treasury to the working of this provision, see *Finance Report*, 1880, p. 331; 1881, p. 221. For the connection between this provision and the "bank panic" of March, 1881, see *Comptroller's Report* for 1881, p. 39; *Atlantic Monthly*, February, 1882, p. 195.

[2] See in *Comptroller's Report*, 1889, p. 33, a list of national banks without circulation.

authority for free banking given by the Resumption Act, the total banking capital and note circulation alike declined, until the summer of 1878. Both increased after the resumption of specie payments, but the circulation of bank-notes, although open to all banks, and to any amount, never reached its old point. This course of things was entirely inconsistent with the existence of large profits, arising from the issue of notes in the method prescribed by the national system. It is impossible to believe that, if such profits were reaped, existing banks would have neglected or renounced the opportunity of making them, or that the multitude of private bankers and of State banks would have failed to seize upon an opportunity which was free to all,[1] by organizing under the national system.

The business in general reasonably profitable.

That a good rate of profit has been made by the national banks upon their general business is no doubt true. Especially during the period of irredeemable paper and of fluctuating credit, their harvest was large. The law has from the first required of every bank that a part of its profits should be reserved, until a surplus amounting to one fifth of the capital should be accumulated. A solid foundation was laid for this surplus in many cases, by the sale at a high premium of the gold held by State banks before their reorganization, and retained by them until the adoption of the paper system had plainly become

[1] Until the spring of 1881, two thirds of the bonds held by the banks to secure their circulation bore interest at not less than five per cent. and a considerable amount at six per cent.

definitive. The banks had thus on the average accumulated the surplus required by law before the end of 1869, since which time their accumulation has increased or diminished, as the times were prosperous or the reverse, the aggregate surplus varying from 26.6 per cent. of the capital in October, 1875, to 25 per cent. in December, 1878, and again to nearly 33 per cent. in October, 1890.[1] The annual dividends paid from earnings after the reservation for surplus, also stood at their highest point during the period of most rapid accumulation, and have varied from a maximum of 10.58 per cent. of the capital to a minimum of 7.59 per cent. Without doubt this rate of dividends shows a prosperous business, but how far the prosperity is due to privileges enjoyed under the national system, may be judged from the approach which State banks have made to national banks in their earning capacity.[2]

The highest point reached by the circulation of the national banks after the resumption of specie payments was at the end of 1881, when it stood above $325,000,000. From that point, however, its decline

[1] For many years the largest surplus held has belonged to a bank which issues no notes, but has accumulated many times the amount of its capital. It is true in general that the banks of largest surplus have not owed it to their issue of notes.

[2] In New York, where there are about 150 banks organized under the laws of the State, the percentage of surplus and undivided profits to capital under the two systems respectively was in September, 1879, 1882, 1884, and 1889 as follows:

	National banks.	*State banks.*
September, 1879	.45	.37
" 1882	.58	.51
" 1884	.57	.53
" 1889	.86	.68

See *Reports of State Banking Department* and *Comptroller's Report.*

has been rapid, with hardly a break in the continuous fall, until at the close of 1890 it stood below $123,000,000. The proximate cause of this remarkable disappearance of what was originally the leading feature of the system, is of course the steady payment of the national debt and rise of the national credit, and the natural disinclination of banks to hold, on any considerable scale, investments which are no longer to be relied upon to yield the holder so much as 2½ per cent. But behind this unexpected failure of the basis on which the secured circulation rests, is the more serious difficulty presented, by the indisposition to seek for any new method of securing the notes. Few schemes thus far proposed have gone beyond the point of allowing the issue of notes to the par value of the bonds deposited, and of substituting for the bonds now outstanding a fresh issue, bearing a rate of interest low enough to avoid the rise of any considerable premium. No such measure, however, can afford any permanent remedy. A paper currency, therefore, which has given unqualified satisfaction and which forms a natural part of a banking system otherwise enjoying unexampled prosperity and rendering valuable service to the community, bids fair to become extinct, without any real effort to prolong its existence. This singular result is apparently due, in part, to the continued force of some popular prejudices against any issue of notes by corporations and in favor of direct issues of paper by the government, and in part to the competition of other schemes of currency, strengthened by the long controversy as to the silver coinage.

Continuous decline of the bank circulation.

CHAPTER X.

THE BANK OF ENGLAND.

THE national banks of the United States, it has been seen, rest upon the simple principle of securing the solvency of bank-notes by a pledge of salable property. The Bank of England, although originally a bank of the simplest type, like the Bank of France, issues notes which, since the adoption of the act of 1844, are secured by a mixture of securities and specie, upon a system which presents an interesting and important variation upon that detailed in the last chapter. Disregarding its chronological relation, therefore, to the cases already discussed, we take it up as coming in the third place in a natural order of classification.

Modified type of secured issue.

The Bank of England owes its origin to the financial straits to which the government of William and Mary found itself reduced in carrying on the war with Louis the Fourteenth. The revenues of the kingdom were small, the public credit weak, and the very title of the dynasty unsettled. The growing wealth and business of the country had caused private banking houses to spring up. The paper given by these houses to their creditors had acquired a circulation, limited indeed, but

Origin of the Bank of England.

sufficient to show its convenience, and projects for the establishment of a public institution on the scale, if not on the model, of the great continental banks, had been discussed for many years.[1] Under these circumstances, as an expedient for raising a million sterling, for which no other resource could be found, the government in 1694 adopted the scheme proposed by William Paterson, a Scotch adventurer, and proposed to Parliament that a loan should be offered for public subscription and made attractive by a grant of incorporation, with banking privileges to be enjoyed by the subscribers and their successors. The measure seems to have been contested chiefly, although not wholly, on party grounds, and was passed after a severe struggle, and thus the Bank of England came into existence as a Whig corporation.[2]

The act of 1694 provided for a loan to the government of £1,200,000, bearing interest at eight per

[1] McLeod, *Theory and Practice of Banking*, i., p. 210, prints a "goldsmith's note" which is still preserved, dated 1684. And see *Macaulay's History*, vii., p. 134. A curious pamphlet of 1676 (?) on the introduction of private banking in London is reprinted in the *Quarterly Journal of Economics*, January, 1888. And see *Ibid.*, July, 1888, p. 482, for notes of schemes for a national bank, broached at various dates in the seventeenth century.

[2] The fiscal character of the measure is well shown by its title: "An Act for granting to their Majesties several Rates and Duties upon Tunnage of Ships and Vessels, and upon Beer, Ale, and other Liquors, for securing certain Recompenses and Advantages in the said Act mentioned, to such Persons as shall voluntarily advance the sum of fifteen hundred thousand Pounds towards carrying on the War against *France*," 5 *William and Mary*, ch. 20.

For the political relations of the Bank of England, at and after its establishment, see *Macaulay's History*, vii., p. 147.

cent., and incorporated the subscribers, with this amount of nominal capital, as the Governor and Company of the Bank of England,—a title which has never been changed. The corporation was empowered to deal in coin, bullion, and exchange, and to lend upon security, but was forbidden to deal in merchandise in any form. It could not borrow nor give security by bill, bond, or agreement, for an amount exceeding its capital; no provision was made for the transfer of its bills, "obligatory or of credit," except by indorsement; nor was any monopoly created in its favor. In this form the charter of the Bank gave little promise of its future importance. Three years later, however, the necessities of the government and the embarrassments of the Bank, which had been obliged to suspend payment in 1696, led to a revision of the charter, in which the outlines of the great structure begin to appear.[1] The issue of notes payable to bearer on demand was authorized, thus laying the foundation for a true bank-note circulation,[2] the monopoly of corporate organization was granted by providing that, during the continuance of the charter, no other bank or corporation in the nature of a bank should be allowed in the kingdom; and, on the other hand, the capital was doubled by a fresh advance from the stock-

Monopoly established in 1697.

[1] 8 *and* 9 *William III.*, ch. 20.

[2] The notes issued under the act of 1694 appear to have borne interest, and being made to order, could have had but a limited circulation. No notes of less than £20 were issued until in 1759 the Bank began the issue of notes for £15 and £10. Anderson's *Origin of Commerce*, ii., p. 413.

holders to the government, and the interest payable by the latter was reduced to six per cent.

From this point the growth of the Bank and the increase of its influence were rapid. The corporation became the chief depository of the public money, and the agent of the Treasury in many financial operations. In 1720 it carried on a mad struggle with the South Sea Company for the control of the business of refunding the national debt, and managed, although with difficulty, to save its own credit in the crisis which destroyed its rival. Further loans to the government and additions to the capital of the Bank were made in quick succession. In 1722 its capital stood at nearly nine millions, and it was also able to establish from its profits the surplus fund now called "the Rest," and thus to save its dividends from great fluctuation. In 1782 the capital had risen to more than eleven millions and a half, and in 1816 it had risen to £14,553,000, at which figure it has stood ever since. Of the loans to the government, which had risen in nearly the same proportion as the capital, one fourth was repaid in 1834, reducing the total to £11,015,100, which is its present amount. By the year 1750 the government had succeeded in reducing the interest on most of its debt to the Bank to three per cent., and it has since used the opportunity afforded by the periodical necessity for a renewal of the charter, to lessen still more the burden of its interest, by requiring from the Bank an annual bonus and other pecuniary concessions, in consideration of the extension of its monopoly.

This monopoly, dating, as has just been said, from the act of 1697, and confirmed by the act of 1707, was further defined by the act of 1742[1] as the right of "exclusive banking," the true intent being, as is declared in the latter year, that "no other Bank shall be erected, established or allowed by Parliament, and that it shall not be lawful for any Body Politick or Corporate whatsoever, erected or to be erected, or for any other Persons whatsoever, united or to be united, in Covenants or Partnership, exceeding the number of six Persons, in that Part of *Great Britain* called *England*, to borrow, owe, or take up, any Sum or Sums of Money on their Bills or Notes, payable at Demand, or at any less Time than six Months from the borrowing thereof, during the Continuance of such said Privilege to the said Governor and Company." It is clear from this language that Parliament understood by "banking" only the issue of notes, and that the exclusive privilege of the Bank did not prevent the issue of such notes by partnerships having only six partners or less, nor the performance of the other banking functions by companies or partnerships of a greater number of partners. Notes continued to be issued by the London private banking houses, some of which were of longer standing than the Bank of England itself, and by country bankers, of whom the number increased rapidly in the second half of the eighteenth century. The London bankers, it is true, began not far from the year 1772 to discontinue the issue of

Meaning of the monopoly of "banking."

[1] 6 *Anne*, ch. 22; 15 *George II.*, ch. 13.

notes,[1] finding the check system identical in its advantages and more convenient in practice; but their right of issue was merely in abeyance, until it was formally taken away in 1844. The country bankers, however, with many vicissitudes of fortune, have continued the issue of notes to this day, subject to the restrictions contained in the Bank Charter Act of 1844, presently to be described.

That the Bank monopoly in its strict interpretation also permitted the exercise of all banking functions, except issue, by joint-stock banks and companies of more than six persons, had indeed been noticed, but seems to have been little considered, until the discussions of 1826, which were renewed upon the revision of the charter in 1833. The growing demands of the country for banking facilities, and the slowness with which the Bank of England responded to these demands by the establishment of branches, caused much unsound banking by private firms, while a lingering doubt as to the meaning of the monopoly prevented the foundation of joint-stock banks with large capital. Lord Liverpool is reported as declaring in 1826, that the effect of the law "is to permit every description of banking, except that which is solid and secure." The result of this state of things was that, notwithstanding the resistance of the Bank of England, an act was passed in 1826, giving to companies of more than six persons the right of issuing

Joint-stock banking made legal, 1826.

[1] McLeod's *Dictionary of Political Economy*, p. 88. In his *Theory and Practice of Banking*, i., p. 211, Mr. McLeod says that the latest London banker's note preserved is dated 1793.

notes, when established at a greater distance than sixty-five miles from London, thus creating an important exception to the monopoly hitherto enjoyed by the Bank. The act of 1833, for renewing the charter, also expressly declared that companies and partnerships, although composed of more than six persons, might carry on the business of banking in London, or within the radius of sixty-five miles, provided they should issue no circulating notes.[1]

This legislation was followed by a great extension of joint-stock banking. The London and Westminster Joint-Stock Bank, now one of the largest banks of deposit in existence, was established the next year,[2] and many banks of issue began business outside of the geographical limit. The extension, however, was too rapid to be sound; the disturbed condition of business affairs for a large part of the next decade stimulated agitation; and public opinion was disposed to find in a vicious note circulation the cause of the repeated commercial crises. The necessity for a renewal of the charter of the Bank of England in 1844 gave to the government of Sir Robert Peel an opportunity, both for revising the organization of the Bank, and for putting an end to the increase of the issues of the joint-stock banks, and the result was the passage of the measure known as the "Bank

The Bank Charter Act of 1844.

[1] 7 *George IV.*, ch. 46; 3 and 4 *William IV.*, ch. 98.

[2] The London and Westminster was for many years under the management of James W. Gilbart, author of several works on banking, and owes its existence largely to his sagacity. For a short account of its early struggles, see Gilbart, *Principles and Practice of Banking*, p. 462.

Charter Act of 1844," or "Peel's Act," in which are embodied the leading provisions by which the bank-note circulation of England and Wales is now regulated.[1] By this act, Parliament undertook to make the notes of the Bank of England secure, and to limit the issue of bank-notes of all other kinds in England and Wales.

To accomplish the first of these objects the act provided for the division of the Bank into two departments, the Issue Department and the Banking Department. The former was charged exclusively with the issue and redemption of notes; the latter was charged with the other functions of banking, including the ordinary business of discount and deposit; and in all dealings with each other the two departments were made as independent as if they belonged to distinct corporations. For all notes issued by it the Issue Department was required to hold either government securities, or coin or bullion; and the amount of securities which it could hold being limited by the original provision to £14,000,000, it followed that for all notes outstanding in excess of that amount it must have an equivalent in the precious metals.[2] As

Separation of Issue and Banking.

[1] 7 and 8 *Victoria*, ch. 32. For abstracts of this important act, see McCulloch, *Commercial Dictionary* (edition of 1856), p. 84; Gilbart, *Principles and Practice of Banking*, p. 428; Fenn, *Compendium of the Funds* (ed. 1883), p. 77.

[2] The act provides that of the coin and bullion held by the Issue Department one fifth may be silver. For the reason for this provision see *Hansard's Debates*, May, 20, 1844, p. 1334. The Bank ceased to hold silver for this purpose in September, 1853. The conditions on which silver might again be held were stated by the Bank in 1881. *Conférence Monétaire Internationale*, ii., p. 139.

experience had shown that the ordinary uses of the country never failed to require an amount of notes higher than £14,000,000, this provision insured the presence of coin or bullion for the redemption of all notes whose presentation for payment could be deemed morally possible, and made it unnecessary to fix any limit to the issue. The ordinary business of the Issue Department was then reduced to the automatic function of giving out notes for coin, or coin for notes,[1] to whatever extent and from whatever quarter such exchange might be required.

Under this arrangement the Banking Department carries on its business of buying securities and using its credit in the form of deposit accounts, on the same general principles on which any bank of deposit and discount is conducted. It is bound to meet all its demand liabilities in cash, and for this purpose it habitually maintains a reserve, consisting either of specie or of notes issued by the Issue Department, which are convertible into specie. It is bound to make its payments in gold, if so required, like other banks; but it may make payment in notes with the consent of the payee; and if, for the convenience of its customers, it finds occasion to pay out a greater amount of notes than it receives in payments made to it, or in deposits, it must procure such notes, as any other bank or any private person

[1] The Issue Department is also made an intermediary between the public and the Mint, being required to buy all gold bullion offered at 77s. 9d. per standard ounce. The ounce is coined into 77s. 10½d., the difference being the estimated equivalent for a loss of interest, caused by the delay incident to the actual coining at the Mint. Hankey, *On Banking*, p. 98.

must, by taking an equivalent amount of gold to the Issue Department and procuring notes therefor. Indeed, so completely is the Banking Department deprived of all special facilities or privileges in dealing with the Issue Department, that it has often been said that, for all practical purposes, the notes might as well be issued by a public office at Westminster as by a department of the Bank itself.[1]

Regulation of country bank issues.

The second purpose of Peel's Act is accomplished by a series of provisions which prevent any increase of the note issues of joint-stock and private banks, beyond the average at which they stood for the twelve weeks preceding April 27, 1844. No bank not then engaged in the issue of notes is allowed to issue them, and no bank then existing can carry its issue beyond the limit thus fixed for it. It is provided, however, that if any bank issuing notes at the time when the act was passed shall close its business, or become bankrupt, or discontinue its issues by agreement with the Bank of England or otherwise, then the latter may add to the amount of securities held in its Issue Department, or in other words to the amount of notes for which it holds securities and not coin, to the extent

[1] In Ricardo's pamphlet, *A Plan for a National Bank*, (*Works*, p. 499), it is proposed that notes should be issued to the Bank by public commissioners, holding securities and gold substantially as at present. This pamphlet, left in MS. at Ricardo's death and first published in 1824, is the first distinct proposition which we now recollect for the separation of the issue and banking departments. Public discussion of the subject seems to have begun as early as 1837. The suggestion that the separation was suggested by the New York free banking system is certainly without foundation. *Old and New*, viii., 590.

of two thirds of the amount of the joint-stock or private bank-notes thus withdrawn from circulation. The act then plainly looks forward to the ultimate withdrawal of all other notes than those of the Bank of England, and to the filling of the vacant place by the latter, in a certain measure.[1] No new issues being permitted, every change, however brought about, diminishes the amount of country bank-notes left in use. The progress towards extinction is probably slower than was expected. Still, since 1844 the authorized country bank issue has been reduced, by the winding up of banks or by the surrender of the right, from £8,648,853 to £4,813,400 in November, 1890,[2] and the Bank of England has added, under the authority of the act, to its own issues covered by securities only, until the limit has risen to £16,450,000. But it is plainly not the policy of this legislation that there should ever be a large circulation of bank-notes. The smallest note issued by the Bank, indeed the smallest lawfully issued by any authority since 1829, is for £5, a denomination too large to make its way far from cities and large towns, and of but limited use even in those places.[3]

[1] For some comments on the intention of the act of 1844 in this respect, see *Economist*, 1889, pp. 505, 697. Some intimations of measures for ending the issue by country banks were given by Mr. Goschen in his budget speech, April 15, 1889. See *Hansard's Debates*, p. 535.

[2] The actual average issue of notes by the country banks, for four weeks before the date here given, was only £2,455,077.

[3] The Bank of England issued no notes so small as £5 until after 1759. See p. 156. In 1797, after the suspension of specie payment, it was authorized to issue notes as small as £1, but withdrew them after

A large circulation of sovereigns, affording a solid basis of specie in the hands of the people, with a small amount of convertible notes for convenient use in the larger cash transactions, is the ideal condition towards which the uniform current of English law has been directed for nearly fifty years. In the meantime, however, the current of public opinion has undergone a considerable change as to the point at which the lowest denomination of notes should be fixed. The convenience of the one-pound note, long in use in Scotland, has made a strong impression, and it now appears highly probable that the issue of such notes by the Bank of England is not far off. The legislation for that purpose, when it comes, is likely to affect seriously the issues of the country banks and perhaps to extinguish them altogether, and the substitution of such notes for sovereigns on any great scale must also change materially the practical conditions under which the Bank of England has long issued its circulation.[1]

To illustrate more clearly the operation of the act we will take the account of the Bank as it stood September 7, 1844, being the account on which the

the return to specie. It made a temporary issue of them during the crisis at the end of 1825 and in 1826, but these also were withdrawn before 1829, in conformity with an act passed in 1826. The issue of £1 notes by country bankers was forbidden as early as 1777, but was permitted from 1797 to 1829.

[1] See, in the *Economist*, December 7, 1889, an article on Currency Reform. Also *Journal of the Institute of Bankers*, January, 1890, for a paper, by R. H. Inglis Palgrave, on the Note Circulation. Mr. Palgrave favors giving the right of issue to local banks, with proper provisions for securing notes and insuring convertibility.

act first took effect. The situation of the Bank at that date[1] was as follows:

Liabilities.		*Resources.*	
Capital . . .	£14.6 m'ns	Government Debt . .	£11. m'ns
Rest	3.6 "	" Securities	17.6 "
Public Deposits	3.6 "	Other Securities . . .	7.8 "
Other "	8.6 "	Coin and Bullion . .	15.2 "
Seven-day Bills	1.		
Notes . . .	20.2		
	51.6		51.6

As no attempt was made by law to protect by preference any special class of liabilities, before the passage of Peel's Act, it follows that the resources set down in this statement were held equally for notes and deposits; and it is at least conceivable that there might be so strong a demand for coin by depositors or noteholders, or both, as to exhaust the reserve, while a large issue of notes was still outstanding, in which case payment of the notes must be suspended. Thus in the frightful panic of December, 1825, the coin and bullion of the Bank was reduced to £1,027,000 and suspension was imminent, while notes were still outstanding to the amount of £23,359,840. Such a possibility became still more serious after the act of 1833 declared that the notes of the Bank, so long as they continued to be redeemed on presentation, should be a legal tender in

[1] In the Bank of England statements, Rest (*i. e.* the balance of the account) means the net profits on hand; Other Deposits comprise individual deposits and deposits by banks; Seven-day Bills are post-notes, still issued to a small amount; Government Debt is the loan made by the Bank to the government, in order to secure its charter; and Other Securities include loans and advances to customers upon security.

England and Wales in all payments except those at the Bank itself. It was, therefore, an important object, in separating the departments, to insure the payment of the notes in any event by pledging for that purpose a sufficient amount of securities and of specie.[1] How this result was accomplished is easily seen in the form of statement of the Bank account, adopted upon the passage of the act, and ever since adhered to:

Security of issues under Peel's Act.

ISSUE DEPARTMENT.

Notes . . .	£20.2 m'ns	Government debt . . .	£11. m'ns
		Other government securities	3. "
		Coin and bullion . . .	6.2 "
	£20.2 "		£20.2 "

BANKING DEPARTMENT.

Capital . . .	£14.6 m'ns	Government securities	£14.6 m'ns
Rest	3.6 "	Other securities . . .	7.8 "
Public deposits .	3.6 "	Notes[2]	
Other " .	8.6 "	Coin and bullion . .	9. "
Seven-day bills .	1. "		
	31.4 "		31.4 "

[1] Whether in case of the insolvency of the Bank the securities and specie in the Issue Department would be held for the preferred claim of the notes, or would become a part of the general assets, to be divided among all the creditors, is not explicitly declared by the act and has been doubted. But it has no doubt been the common understanding, from the first, that the devotion of the resources of the Issue Department to the payment of its notes is indefeasible. See *Parliamentary Documents*, 1857–58, v., p. 427.

[2] The above shows the effect of the separation of accounts taken by itself. For convenience the Banking Department also transferred 8.2 millions of coin and bullion to the Issue Department and received notes therefor, so that in the published accounts the banking reserve was 8.2 millions of notes and .8 million of coin, and both the notes and the coin and bullion in the accounts of the Issue Department were raised by 8.2 millions.

The thoroughness of the provision here made for the security of the bank-note is attested by the fact, that since the passage of the act there has never been a moment when the convertibility of the note has been open to doubt. The lowest point to which the notes in actual circulation outside of the Bank have ever been reduced was a little below £17,000,000 in December, 1848, and this left in the vaults of the Issue Department nearly £14,000,000 in specie, with no demand for it on the part of the public. Indeed, the Bank of England note, under the act of 1844, has become little more than a warrant entitling the holder to so much gold actually lying in the Bank vaults, and thus the whole question as to the solvency of the paper currency has been removed from the field of debate, where it had been agitated for so many years. The Issue Department gains nothing from an increase of the circulation, and can lose nothing by its diminution. The whole problem as to the bank-note is reduced to a mere inquiry as to the preference of the public for coin or for a certificate calling for coin.

It is evident also that to the Banking Department it is of no consequence, except as regards convenience, whether it uses notes or gold in its business. If it prefers gold it has only to send in for redemption such notes as it holds or receives in the course of its business; if it prefers notes it has only to send in its gold for exchange. Its reserve is in fact composed like that of any other bank, of gold or of notes which are good for gold, or of both; and this reserve it must

Separation of departments is complete.

procure, must maintain, and in case of need must replenish, as any other bank must, by properly adjusting its purchases of securities. Its profits would obviously be the same as now if it discontinued the use of notes altogether, except so far as its business might be affected by the mere difference of convenience to its customers. Indeed, nearly the whole income of the Bank of England, beyond the simple return on the investment of its capital, is derived from the use of its credit in the form of deposits in the Banking Department. So far as concerns the Issue Department, the only possible source of income open to it under the act of 1844 is limited to the interest received on the government debt and securities held by it, now amounting, as has been said to £16,450,000. This interest is offset, however, by payments to the government and by other charges, to such an extent that the question has been raised seriously, whether it would not be for the advantage of the stockholders if the Bank were relieved from all connection with the issue of notes.[1]

Suspension of the limit of uncovered issue.

Complete as is the separation between the departments in theory, and generally even in fact, it has nevertheless happened several times, under the exceptional conditions of a financial crisis, that the embarrassments of the Banking Department have

[1] The annual profit from the Issue Department is estimated by Mr. Hankey at about £100,000. Hankey *On Banking* (3d ed.), p. 63. In the *Economist*, April 17, 1875, is a careful calculation by Mr. R. H. Inglis Palgrave, showing that the government would probably be a loser, if it were to substitute its own notes for the issue now carried on by the Bank of England and the country banks.

affected the issue of notes, in a manner not originally contemplated by the framers of the act. On three occasions it has been found necessary to disregard that provision which limits the securities held by the Issue Department, and more than once besides this extreme measure has been escaped with difficulty.[1] In order to understand the real significance of these occurrences, it is necessary to take into consideration the circumstances under which the Bank of England holds its banking reserve.

Position of the Bank as a centre of finance.

The most striking fact in the situation of the Bank of England is that the Bank is the centre of a great system of joint-stock and private banks, whose aggregate business and liabilities are many times greater than its own, and that to this system of banks are confided the financial affairs of the city which may almost be said to be the Clearing House of the world. It is at all events true that many of the largest trades in the world make their settlement in London, and that especially the world's supply of gold there finds its natural point of distribution. From this it would follow, even if England were not herself a great lender of capital, that many of the operations of lending and paying undertaken in other countries must be carried on through London. The banks through which a cosmopolitan business of this kind

[1] The limiting clause of the act of 1844 was set aside, or, as is commonly said, "suspended," October 25, 1847, November 12, 1857, and May 12, 1866. In February, 1861, and in May and September, 1864, the condition of things was critical; and in November, 1873, the suspension of the act appeared for some days not improbable.

passes must at times find themselves subject to great and sudden demands. The nature of their liabilities is not constant; it varies with every change in the condition of any foreign country of importance, and is at one time steady, and at another time uncertain. The reserves, therefore, which are at one time adequate for the protection of these liabilities, are at another time too small. These reserves, however, which belong to the individual members of the great system of banks, are in practice not held by the banks themselves. The London banks, from long habit, keep their chief reserves as private persons might, deposited in the Bank of England, retaining in their own hands only such small amounts as are needed for the demands of the moment, and drawing upon the Bank for more important sums. Of the "other deposits" of the Bank of England a large part represents the liability of the Bank to its neighbors incurred in this manner.[1]

The position of the Bank of England, then, is not simply that of a bank whose deposits are liable to sudden fluctuations of a peculiar nature; it is also a position of great responsibility. Whether by its own

[1] Dun, *British Banking Statistics*, p. 124; Bagehot, *Lombard Street*, p. 307. In 1877, when the bankers' deposits in the Bank of England were reported on, their maximum and minimum points were in January and May respectively, the deposit accounts standing as follows:

	January 10.	*May* 10.
Exchequer deposits . .	£ 1.2 millions.	£ 4.4 millions.
Bankers' " . .	13.3 "	8. "
All other " . .	18.3 "	15.9 "
Total	32.8 "	28.3 "

For this report see *Parliamentary Documents*, 1878, xlvi.

action or by the force of circumstances, the Bank holds in its charge that on which the solvency of the banks in general, the safety of the commercial public, and the credit of England alike depend. Its managers have sometimes professed to regard it as simply a bank carried on for the profit of its own stockholders; but so long as it holds the banking deposits it has in its hands the financial safety of the whole community and the real leadership of the money-market, and cannot escape its accountability for the manner in which it performs the duties of its position. As regards the issue of notes its duties are too plain and even mechanical to throw upon it any serious burden of this kind, but as the depository of the other banks it is in effect charged with the duty of providing in some measure for the safety of all.

Its responsibility in managing its reserve.

In this respect, as holding a reserve wherewith to repay the borrowed reserves of others, the Bank of England, as has been said, holds a position remarkably similar to that of the banks of New York City, with the difference, however, that its responsibility for prudent management is undivided and, therefore, inevitable. Of course, the position would be one of perfect safety if the Banking Department regularly held cash for all its banking liabilities,—that is, either coin or notes redeemable in coin by the Issue Department. Its sources of profit being the same, however, as those of other banks, the Banking Department finds its interest as they do, in the conversion of idle cash into interest-bearing securities, so far as possible, and in holding, therefore, no larger

cash reserve than is required for safety. Acting on this reserve by raising or lowering its rate of discount,[1] it is under great temptation to defer as long as possible the diminution of its business by the raising of its rate, and may thus be led to keep itself weak, down to the moment when it needs to be strong. And it may happen, moreover, that the reserve, being suddenly reduced by causes not to be foreseen, cannot be raised by the slow action of the rate of discount, in time to escape all the consequences of such misfortune.[2] In every case of remarkable pressure which has occurred since the separation of the two departments, and in most of those which happened before, the real difficulty presented will be found to have been that of meeting liabilities for deposits with a reserve which had become insufficient, either from continued negligence in the past, or from sudden demands on a great scale. Of these cases we will take for examination, as an illustration fo the present topic, the critical situation of the Bank in the great commercial panic of November, 1857, a case which may fairly be regarded as typical.

There is no doubt that in England the materials for a crisis had been long in preparation. Rapid commercial expansion and a great extension of credit had brought the usual results in the form of unsound

[1] Until 1833 the usury laws had led the Bank to adhere to a uniform rate of discount. The present system of a sliding scale was not fairly adopted before 1839.

[2] That the Bank, as an important and usually well informed leader, may lead the market, but cannot control it at pleasure by changes of rate, see Bagehot's *Lombard Street*, p. 114.

business, of speculative prices, and of extreme sensitiveness to any threatening influence. If no sudden pressure had occurred all might have passed off in a mere subsidence of activity and in general depression; but the sudden occurrence of a disastrous revulsion in the United States, bringing ruin to some and carrying apprehension to all, developed a crisis which took the whole community of Great Britain by surprise. In August the state of things was reported to be "not unsatisfactory," and no fear seems to have been felt until the middle of September, when heavy failures in New York, beginning with that of the Ohio Life Insurance and Trust Company on the 24th of August, became known in London. Still, although gold began to leave England for the continent, and the pressure in New York had caused the cessation of specie exports to England, the directors of the Bank of England seem not to have thought the difficulty serious. It was not until October 8th, when the news of the general suspension of payments in Philadelphia and Baltimore proved that something more than an ordinary embarrassment existed, that they determined to raise their rate of discount, from the point at which it had stood since July 16th, to six per cent. At this point the condition of the Bank was disquieting. In the course of three weeks it had materially increased its loans, but was losing seriously from its reserve, so that the proportion of reserve to liabilities had changed much for the worse, at a time when general uneasiness was beginning to make the commercial public more than ever anxious to

Course of the crisis of November, 1857.

borrow, as a prudent provision for the uncertainties of the immediate future. It may fairly be said then, we believe, that a singular tardiness of action on the part of the Bank was the immediate cause of much that ensued.

Without following the steps by which the crisis from this point was converted into panic, we will take the state of things existing in the early days of November, when the Bank rate stood at eight per cent. At this juncture, the alarm caused by the failure of several large firms and of one or two provincial banks of some importance had intensified the demand for loans, both upon the Bank of England and the other banks in the city. The increasing disposition of the latter to strengthen their own position, in view of the possible heavy demands to which their great liabilities exposed them, not only threw much of the increased pressure for loans upon the Bank of England, but also led to a marked increase in the bankers' balances—that is, in the deposits of reserve by other banks. At the same time with this serious change in the amount and character of the liabilities, the cash resources of the Bank were falling. An active export of specie to the United States had taken a considerable amount from the reserve, the rise of rates on the continent of Europe had made it impossible to draw specie from that quarter, while the apprehension of banks in the interior led to a serious absorption of cash by them. In short, at a time when it was called upon to extend its use of its own credit, the Bank found itself acted upon by

Extraordinary pressure on the Bank.

what has been called an internal drain as well as an external one.

The Bank met this dilemma by raising its rate of discount on the 5th to nine per cent., in the hope of repelling the least necessitous borrowers, and by making in the course of the next week an increase of loans to the amount of three millions and a half. Before the end of the week, however, the state of affairs had become desperate. The general alarm had deepened with the rapid succession of failures in the commercial world and the suspension of the great Western Bank of Scotland,[1] and the moderate increase of loans by the Bank of England had done nothing toward quieting the public. Some sales of securities had been effected by the Bank, but the drain upon its reserve as well as the increasing liability for bankers' deposits continued. The rate of discount was raised on the 9th to ten per cent. but without avail. The joint-stock banks and private bankers, had finally ceased discounting, so that from Monday, the 9th, the whole demand for loans was thrown upon the Bank of England, whose reserve by the 11th had fallen to little more than one tenth of its "other deposits." On that day came the suspension of the City of Glasgow Bank,[2] caused by the general alarm created by the failure of the Western Bank; other banks called for assistance; and a great

[1] The ruin of this bank, which in 1857 discounted to the amount of £20,000,000 and had deposits of £6,500,000, was precipitated by losses in America, although not strictly caused by them.

[2] The final and disastrous failure of this bank in October, 1878, will long be remembered.

discounting firm in the city failed on the same day. In four days, beginning with the 9th, the Bank advanced to the public over five millions sterling, but without the effect of subduing the panic or stopping the drain of its reserve. On the evening of the 12th it found itself with a liability for deposits amounting to thirteen millions, and a reserve of cash in its Banking Department of only £581,000,[1] an amount which more than one depositor could exhaust by his single check. This feeble reserve might be expected to disappear before the close of the next day.

The reserve is nearly expended.

In all this there had been nothing resembling a run upon the Issue Department. Gold required for export or for the interior was indeed drawn ultimately from that department, for it was provided by those who were directly or indirectly creditors of the Banking Department, who drew therefore from the banking reserve and thus caused notes held in that reserve to be presented to the Issue Department for redemption. But the gold was not obtained by the presentation of notes hitherto in circulation or held outside of the Bank, for from the 10th of October to the 11th of November, the amount of notes thus in the hands of the public is shown by the account to have been almost without change. What had occurred was that the Banking Department had been caught, at the beginning of a severe pressure, with an insufficient banking reserve and had

[1] Of this only £384,000 was in London, the remainder being held by the branches of the Bank. See *Parliamentary Documents*, 1857–58, v., p. 55.

been slow in taking measures for escape. The position of the Bank was such as that of the London and Westminster Bank might have been, had its reserve of cash run down while its liability was large, except that the latter had no chain of dependent banks. It was a case of near approach of failure, as simple in its essentials as that of any private banker who is unable to meet his depositors, or any incorporated bank which is not a bank of issue and meets with similar misfortune.

Impossible to restore it by usual means.

Under ordinary circumstances a ready means of replenishing the reserve might be found in the sale of securities for cash, and such a course, it has been suggested, should be taken by the Bank of England in a case like the present. This resource can be used, however, at the height of a crisis, only to a moderate extent. Buyers, even of the soundest securities, are at such a time few and reluctant, partly because of the universal disposition to keep a firm hold upon cash as the safest provision for an unknown future, and partly because of the prospect that low prices may be succeeded by still lower. Moreover, it is to be remembered that purchases to any considerable extent would have to be made by those holders of capital who have their funds deposited either with the joint-stock or private banks, or with the Bank of England itself; and in either case the check given in payment for securities would finally be a demand upon the Bank of England made by one of its depositors. The sale of securities would then serve to extinguish a part of the liabilities, and to that extent would improve the condition of

the Bank, but it would bring in no cash to meet the steady drain upon the reserve.[1]

Thus the Bank, on the 12th of November, reached the end of its tether. Following the precedent of the year 1847, therefore, the management informed the government of the critical condition in which they stood, and received in return a virtual authority for the issue by the Issue Department of a further amount of notes secured by government securities.[2] Thus empowered, the Banking Department transferred to the Issue Department securities to the amount of two millions, and in exchange therefor received notes which were placed in the reserve. The operation was in effect a sale of securities to the Issue Department, in default of other purchasers, and the receipt of payment in notes, redeemable on presentation. The effect on the Issue Department was to increase the absolute amount as well as the proportion of notes issued by it upon securities instead of coin or bullion, but the notes did not cease to be redeemed in the regular course of business. Carried to a great extent the

Suspension of the act, and its meaning.

[1] On the possibility of a sale of securities on a large scale during a panic, see Bagehot's *Lombard Street*, p. 190.

[2] This practical setting aside of an act of Parliament was in the form of an assurance that, if the Bank found it necessary to take the step proposed, the ministry would ask Parliament to indemnify the Governor and Company for any consequences of such illegal action. Besides the publication of the entire correspondence in the Parliamentary documents, which has been made on every occasion of the suspension of the Bank Act, the "government letter" is given by the *Economist* of November 14, 1857, and all the correspondence for 1866 in the *Annual Register* of that year, p. 305. See also Levi's *History of British Commerce* (2nd edition), pp. 311, 403, 468.

operation might plainly have weakened the notes by endangering their convertibility. Restricted as it was, however, it cannot be said to have had any real influence on the credit of the note issue. It gave to the Banking Department an immediate accession of means to the amount of two millions, with the assurance that more could be had if needed, the only discernible limit to the relief being the conceivable inability of the Issue Department to continue the redemption of an indefinitely enlarged issue of notes —a theoretical limit too distant to have any practical bearing.[1]

Effect of the suspension on the public.

The real assistance given to the Banking Department, however, did not consist so much in the actual addition of cash to its resources, as in the quieting effect of the measure on the public mind. In every such state of affairs it is a factor of prime consequence that much of the public excitement is pure panic,—an unreasoning terror, which multiplies danger by destroying presence of mind. For the easy movement of business under the credit system, confidence in each other and in the future is necessary. The producer or merchant, using borrowed capital, relies upon the sale of goods and upon fresh loans for the means of repaying former advances, and if the current is interrupted, if doubt on the part of buyers prevents sales, or embarrassment of lenders prevents or diminishes loans, the fears of debtors to whom the failure to make their payments punctually means

[1] This whole subject was reported upon, with evidence, by a select committee, in *Parliamentary Documents*, 1857–58, vol. v.

bankruptcy and ruin, become at times ungovernable. No man is any longer sure of any thing except his own indebtedness and its near maturity; there is a universal pressure to borrow, even beyond the real needs of the moment, lest borrowing should presently become impossible; and there is a universal tightening of the grasp on all ready means by such as are so fortunate as to have them. The *sauve qui peut* of merchants, who are desperate as to their means of payment, is as mutually destructive and as fatal to their hopes of escape, as is the crush of a panic-stricken audience, blocking the exit from a burning building. To a community thus dominated by universal terror, the Bank of England was able to say, that its potential reserve was now so enlarged as to fix no limit to its ability to extend its loans and meet all consequent liabilities. The effect of this assurance in allaying the panic was instantaneous. Men ceased to press for what might not be needed after all, and the other banks in the city, no longer dreading demands from their own depositors, resumed their operations. Confidence had indeed suffered too severe a shock to recover without that process of liquidation which is called a revulsion of business; but the liquidation, instead of being immediate, could now be gradual enough to enable debtors to collect and realize upon their resources with some deliberation.

It was not then so much the four millions which the Bank felt safe in adding to its securities in a week after the suspension of the act of 1844, as the moral relief given to the public, which constituted the real

remedy by which the crisis was ended. As for the change in the amount of the note issues of the Bank, we may fairly deny that in itself it had any influence whatever, so trifling was its amount. The notes issued in excess of the statutory limit, and actually in the hands of the public, stood at their highest point on the 20th of November, when they amounted to £928,000, and by the end of the month the Issue Department had returned to its normal condition.[1] Indeed the difference between the minimum and maximum of the outstanding notes for the month was only £1,300,000.

The conditions on which this singular abandonment of the terms of the Bank charter has been allowed are jealously guarded. The Bank has been required to pay over to the government all profits made by it from any increase of issues above the statutory limit,[2] and both in 1857 and 1866 it was required to maintain its rate of discount at ten per cent., so long as it should use the permission given to it. As this rate would drive away business from the Bank as soon as the rate in the general market should fall, this condition insures as speedy a return to the legal limit of the issue as is practicable.

[1] This opinion, that the relief given by the suspension of the limit fixed by the act is a moral relief and is not to be found in the actual issue of notes, is confirmed by the fact that neither in October, 1847, nor in May, 1866, was the issue of notes upon securities increased at all,—the mere announcement that such issue would be made, if needed for the reserve, being sufficient to quell the panic.

[2] The profit on the increase of issues above the limit in 1857 was calculated on £2,000,000, for 41 days at the rate of two per cent. *Parliamentary Documents*, 1857–58, xxxiii., 271, 275.

Whatever the conditions, however, the repeated resort to this extra-legal measure is a remarkable departure from an elaborate scheme of legislation in favor of a crude expedient, and does not easily find its parallel, even in English administration. And the question has been raised, with good reason, as to the real value of a legal limit, which everybody believes will be set aside when it begins to press. Why not, it is said, allow the Issue Department to keep such amount of securities as is found advisable, always holding it to the duty and the test of instant redemption? No doubt if the provisions of the act of 1844 were to be defended solely on the grounds on which they were originally urged by Sir Robert Peel, they would have to be condemned. He expected the act to prove a remedy for financial crises; whereas, not only have such crises recurred with the same rough periodicity since the passage of the act as before it, but they are probably sharper in the London market by reason of the existence of the very law which was to cure them. The act has, however, served the purpose of making the legal-tender paper of England safe and convertible, in every contingency which is even remotely possible. It has rendered an even greater service, while thus eliminating the question of convertibility, by setting in its true light, as the kernel of all banking problems, the question as to the proper management of the banking reserve. No such mistakes of management could now occur as marked the whole course of the history of the Bank in the first half of this century. The Bank was not quick

Question as to real value of legal limit.

to learn the real risks of its position and its responsibilities; but still it has learned them, and now guards its reserve with vigilance, by appropriate means, and with general success. It takes the alarm sooner than formerly, it sets its customary line of supposed safety higher, and thus, in the great crisis of 1873, it escaped the disaster, which befell it in 1857 in a condition of affairs not more dangerous. Whether the provisions of law which have effected these improvements are perfect may be doubted.[1] Probably an elastic provision like that contained in the German legislation would be easier in operation and equally effectual. But some provision other than that suggested by the temporary policy or interest of the Bank itself the law cannot fail to make, in a system of banking and currency so highly concentrated as that which England has long maintained.

Nature and organization of the Bank.

From what has been said, it will be seen that the Bank of England, although a highly privileged establishment, is not a government institution. It has a partial monopoly of the right of issuing notes, which in theory is destined to become complete; it has the distinction of having its notes the only paper legal tender in the United Kingdom; it is the chief depository of a government which maintains no public treasury; it is charged with the duty of keeping the registry of the public debt, and of paying the interest thereon; still it is a private corporation of the familiar type, managed by its own officers, in whose selection the govern-

[1] For Mr. Lowe's bill to authorize the suspension of the limit of 1844, under fixed regulations, see *Economist* for 1873, pp. 741, 748.

ment has no share, and whose responsibility is to their own stockholders alone. The Bank has duties thrown upon it, partly by law and partly by force of circumstances, which make it a highly important member of the body politic, and yet it is in form a corporation intended to earn dividends for the owners of its stock. For many years after its foundation it was even forbidden by law to lend to the government, beyond a certain narrow limit, without the express sanction of Parliament,[1] and although it has now for a long time been a trusted agent, and has at times compromised its own safety by its financial support of the Exchequer, it has never failed in its dealings with the authorities to assert its own essential independence.

The organization of the Bank is as anomalous as its position. It is governed by twenty-four directors, who, by long established custom, must not be bankers, and by a governor and deputy governor. The directors are elected annually, and by usage a part of the board is changed every year; but the changes take place among the younger members, so that after some years of possibly intermittent service, the director's tenure of his position is practically for life. After many years he usually becomes deputy governor for two years, in due rotation, and then governor for the like term, after which and for the remainder of his official life he is a member of an executive council of directors known as the committee of treasury. The director enters upon office, therefore, at an early age, and reaches the positions of most active responsibility only after a long training

[1] This prohibition continued until the year 1793.

in the Bank itself. Such an organization would hardly be proposed if the case were new, but it is, no doubt, well fitted, indeed too well fitted, to preserve the traditions of policy and of management which secure the Bank from rapid change.[1]

Under a direction thus organized, the Bank has now enjoyed a long course of prosperity, seldom interrupted for any length of time. Its imprudent loans to the government early in the wars of the French Revolution caused its long suspension of specie payment, from February, 1797, to May, 1821, but the Bank reaped a rich harvest from its issue of irredeemable paper.[2] In the crisis of December, 1825, it was on the point of failure, and in 1839 it was forced to obtain material aid from the Bank of France.[3] Still, since 1852, its dividends have never been at a less rate than 8 per cent. for any one year, and have averaged 9.95 per cent. since 1880. The stock has not been lower in price than 156 per cent. since 1840, has for thirty-five years steadily kept above 200, and for much of the time since the early part of 1883 has stood well above 300.

[1] On the government of the Bank, see Bagehot, *Lombard Street*, ch. viii.

[2] For a statement of the dividends and bonuses received by the stockholders from 1797 to 1816, together with a searching inquiry into the profits made by the Bank from its relations with the government, see Ricardo's pamphlet, *Proposals for an Economical and Secure Currency*, especially the table, *Works*, p. 427.

[3] For a brief statement of this see *Annual Register*, 1839, p. 289; and Tooke, *History of Prices*, iii., p. 88.

The aid which the Bank secured from the Bank of France in November, 1890, was rather for the security of the public under the pressure of a great calamity than for the protection of the Bank itself.

CHAPTER XI.

THE REICHSBANK OF GERMANY.

In the system upon which German banking has been reorganized since 1875, of which the Reichsbank is the leading example, we have a further development of the conception of a note circulation resting upon a mixed basis of securities and specie, but with the important change that the law contents itself with requiring the maintenance of this basis, without specially pledging it for the payment of the notes. The German system is then one of securing the notes by salutary regulation, rather than by the actual devotion of specific property, either in the hands of the government, as under the national banking system of the United States, or left in the charge of the bank itself, as in the case of the Bank of England.

A further development from the secured system.

When the present German Empire was established in 1871, the reform of the legislation upon currency and banking was felt to be a pressing necessity. In their coinage some German States had ranged themselves under the thaler system and others under the gulden, but in all there was a mass of old coin in circulation of obsolete denominations. The silver standard had been

Origin of the German system of 1875.

adhered to by all. Every member of the North German confederation, except the cities Hamburg, Lubec, and Bremen, and the principality of Lippe, was issuing paper currency for the supply of its own wants. And finally thirty-three banks of issue, with capitals ranging from 1,200,000 marks to 35,000,000, had been established, each upon such basis as the state or city establishing it found good, some holding perpetual charters, some incorporated for terms of years, and some holding only rights revocable at pleasure. These banks differed materially as to the limit of their authorized issues, and were under different obligations as to the holding of reserve. To reduce this mass of confusion to order and to establish unity of system in currency and banking, was a problem which constantly taxed the German mind for the first four or five years of the new Empire.

The law of December, 1871, provided for unity of coinage and prepared the way for the subsequent introduction of the gold standard by the act of July, 1873.[1] Another law of April, 1874, provided for the extinction of the paper currency issued by the several

[1] The coinage laws of 1871 and 1873 are to be found, with copious annotations by Soetbeer, in Bezold's *Gesetzgebung des Deutschen Reichs*, Th. II. Band i., this part of the volume being also issued separately as Soetbeer's *Deutsche Münzverfassung*. See pp. 35, 67. For a translation see Laughlin, *Bimetallism in the United States*, p. 237.

The German law of July, 1873, is often spoken of as a law "demonetizing" silver. In fact it provided for coining gold money and substituting this for silver, but it did not demonetize the silver remaining in circulation, nor has this step ever been taken by Germany, although the government has been empowered to take it when the mass of silver afloat shall have been sufficiently reduced.

German States, by creating a currency of imperial treasury notes (reichs-kassenscheine), convertible into gold upon demand at the Treasury, but not a legal tender, and authorizing the distribution of the notes to the several States, to be used by them in taking up their local issues.[1] Of the imperial paper 120,000,000 marks were distributed to the states in the ratio of population, and 55,000,000 more were advanced in amounts as required, and with this aid twenty local issues, amounting in the aggregate to rather more than 180,000,000 marks, were extinguished. And finally by a law of March, 1875, the banks of issue were brought under a common system, and the reform may be said to have been completed.[2]

Establishment of the Reichsbank.

The new system required the establishment of a central bank to be under the immediate supervision and direction of the imperial government, and the subjection of all other banks of issue to a uniform set of regulations and also to imperial supervision. To secure the first of these two objects, advantage was taken of the peculiar position of the Bank of Prussia. Originally established as a government bank, with a capital of 2,000,000 thalers supplied by the state, this bank had been enlarged by the admission of private stockholders until its capital had risen to 20,000,000

[1] See Bezold, as above, p. 181.

[2] The bank law of 1875 is to be found with Soetbeer's annotations in Bezold, *Gesetzgebung*, Th. II. Band i., p. 255.

A translation is to be found in the *Statistical Journal* for 1875, p. 267.

thalers, but without the surrender by the State of its power of control or of its disproportionate share of the profits. As a part of the new system the Bank of Prussia now became the Bank of the Empire (Reichsbank). The Prussian government was paid for its share of the capital and surplus, and also received 15,000,000 marks for its interest in the goodwill of the establishment; and the capital was then raised by subscription to 120,000,000 marks, the whole of which was thus placed in private hands.[1] The imperial government reserved to itself a direct power of control through the imperial chancellor and also by the appointment of the board of direction, giving to the shareholders the election of a committee charged with certain duties of consultation. The Bank was required to receive and make payments, and to conduct other financial operations for the imperial treasury, without compensation, and also to manage free of cost the receipts and payments of the several states of the Empire. It was thus made in every thing except its ownership a national bank on a large scale, although not the largest, and had its privileges secured to it for fifteen years.

Certain general regulations adapted the thirty-two existing independent[2] banks of issue to the new sys-

[1] For some account of the Bank of Prussia and its successor, see *Bulletin de Statistique et de Législation Comparée*, November, 1886, p. 556. For the distribution of the 40,000 shares in the bank among 7,784 shareholders, see *ibid.*, p. 573.

[2] The banks which are here called "independent" are often designated as "private banks," to distinguish them from the Reichsbank. But as they are incorporated, the term "independent" appears less likely to be equivocal for American readers.

tem. The exclusive right of issuing bank-notes was then given to them and to the Reichsbank, with a provision for transferring to the latter any right of issue which may be surrendered by any of the others.[1] No limit was fixed for the aggregate circulation, but the possible aggregate of notes which could be issued without being covered by cash in hand was fixed at 385,000,000 marks. This total was then apportioned among the banks, having due regard to the amount of the notes previously issued by each and to their probable needs in the future[2]; and by this apportionment the limit for the allowed uncovered issue of every bank taken by itself is now determined. For all notes issued by any bank beyond this limit of uncovered issue, the law requires that cash shall be held, the bank being allowed to count as cash for this purpose German coin, gold bullion, and foreign gold, imperial-treasury notes, and the notes of other banks; and if any notes are issued beyond the limit, and not thus covered by cash, a tax must be paid on them at the rate of five per cent. per annum. To insure the prompt application of this rule, every bank is required to report its

Apportionment and regulation of all issues.

[1] By the refusal of some banks to accept the right of issue under this law, and by the surrender of the right by others, the number of independent banks of issue was reduced at the close of 1889 to thirteen. *Statistiches Jahrbuch für das Deutsche Reich*, 1890, p. 122, where tolerably full statements as to the German banks may be found. It is understood to be the policy of the imperial government to secure the early absorption of all the issues by the Reichsbank.

[2] As to this apportionment see Soetbeer' *Bankverfassung*, in Bezold, as above, p. 273.

condition at four fixed dates in every month; and any excess of notes, shown by any such report, above the allowed limit and not covered by cash, is then taxed $\frac{5}{48}$ of one per cent. It is also required that the cash held, exclusive of the notes of other banks, shall in any case be equal to at least one third of the total circulation, and that the other two thirds shall be protected by discounted paper, having not more than three months to run. The notes issued under this system thus rest upon a solid basis of specie; but in addition, the presence of an ample specie circulation in the country is secured by a provision prohibiting the issue of any notes of lower denomination than one hundred marks.

The application of these provisions is best seen by reference to the accounts of the Reichsbank. The limit of uncovered issue allowed to the Reichsbank by the original apportionment was 250,000,000 out of the total 385,000,000 marks. Fifteen other banks, however, declined to issue notes under the conditions required by the law and four more have since withdrawn their issues; so that by the transfer of these abandoned rights of issue, the Reichsbank has now raised its uncovered limit to 286,585,000 marks.[1]

[1] The significance of the limit may be understood easily by taking any account of the Reichsbank, as for example that of December 7, 1889. As the notes then outstanding were 981.1 millions, and the cash reserve 806.5, the notes exceeded the cash by 174.6; but as the allowed limit of uncovered notes was 286.6, the Bank could still increase its issue by 112 million marks, without being required to add to its cash. In other words, the Bank had a disposable margin of 112 millions, which could be paid out in specie, or in notes calling for specie. This margin, it will be seen, bears a close analogy to the banking reserve of the Bank of England.

It is obvious that the important provision in this system, by which any excess of notes above the uncovered limit, not offset by cash in hand, is taxed, is intended to produce the general effect of a prohibition under mild penalty, which admits some relaxation in case of urgent need. The law makes clear the general design of the law-making power, to secure the protection of all issues beyond a certain point by cash, and the tax of five per cent. is sufficient under ordinary circumstances to effect this object, by taking away the inducement for carrying the issues beyond the line at which taxation begins. But the law has at the same time left open the possibility of an extension of circulation beyond the line thus indicated, whenever the reasons for such extension are strong enough to outweigh the tax. In the familiar case then of a commercial pressure, when the demand for loans is imperative and the market rate is high, it is possible for a bank, under this regulation, to meet the necessities of borrowers and thus to relieve the public apprehension, although it is practically forbidden to reap any important profit from this action. In the absence of any such pressure it is tolerably certain that the issues will be kept within the line, and that the business of issuing notes as gold accumulates, and of paying out gold as notes come in for redemption, will go on naturally and automatically.

The elastic limit.

In this system are easily traceable the general outlines of the English Bank Charter Act of 1844. The suggested absorption of the entire right of issue by the Reichsbank, emphasized as it is by a provision

that the government upon giving due notice may withdraw the right from any bank in 1891, or at the end of any decade thereafter; the fixed limit of notes to be issued without specie; and the automatic arrangement for the issue of notes against cash above that limit; all are closely copied from the English model. The requirement that the cash shall amount in any case to one third of the notes is unusual, although the ratio thus insisted upon has long been familiar in discussions of banking. The distinguishing novelty of the German law, however, is the power given to increase the uncovered issue beyond the limit, subject to payment of the tax of five per cent., in order to secure a certain degree of elasticity at the point where, under the English law, the rigidity of the line drawn by Peel's Act has sometimes presented a frightful dilemma. This elastic limit has several times taken effect in the case of the smaller banks, and also in the case of the Reichsbank in December, 1881, in September and October, 1882, in December, 1884, and January, 1885, in December, 1886, and three times in the latter part of 1889, the issues of the Bank being on some of these cases to a considerable amount beyond the fixed limit. On more than one occasion it seems certain that the operation of the elastic provision was successful in saving the German community from what would have been a severe spasm of contraction under the usual administration of Peel's Act.[1]

Comparison with the English system.

The notes issued upon this plan are not a legal

[1] See the *Economist*, 1882, pp. 41, 1331.

tender, nor are they received at public offices except by virtue of regulations which the government reserves the right of abandoning. They are not secured by any special pledge of the specie or discounted paper which the law requires to be held for their protection. Not only does this paper as well as the specie remain in the possession of the issuing bank, but the law gives to the noteholders no special lien upon the paper or specie, or right of payment in preference to other creditors. The law in short has simply provided by suitable measures that the affairs of the bank, including its issue of notes and the money and securities held by it, shall meet certain tests of soundness, believing that both the ultimate solvency of the bank and the prompt payment of its circulation are thus made secure. The credit of the notes is maintained by their strict convertibility and by the law which makes them everywhere current in payments to any bank of issue. Every bank is required to pay its own notes on presentation; the Reichsbank also, under ordinary circumstances, pays its notes at its branches; and every independent bank is required to redeem its notes at an agency in Berlin or in Frankfort, as the government may determine, in addition to redeeming at its own counter. Every bank of issue is also required to receive at par in payment the notes of every other bank, with the provision that all notes thus received, except those of the Reichsbank, must be either presented for redemption, or used in payments made to the issuing bank or in the city where it is established. This provision,

Regulation of the use of notes.

which imposes a safe restraint upon the smaller banks, is also significant from its tendency to allow the Reichsbank alone to obtain any thing resembling a national circulation.

Position and development of the Reichsbank.

The leading position of the Reichsbank is indeed well assured by its 240 branches of different grades, which carry on its operations in every part of the Empire, and far outnumber all the independent banks of issue and their branches. Of the total capital and surplus of the banks of issue the Reichsbank has not less than forty-seven per cent. It issues five sixths of the entire note circulation, and in a country where the use of deposit accounts is so little developed as in Germany, this fact alone shows that it absorbs a large part of the banking business of the country. Of such use of deposit accounts as exists, however, the Reichsbank has also a large share, in acquiring which its extensive network of branches is no doubt of great service. It appears to have suffered its business of holding deposits payable after notice to lapse, and to have developed actively its accounts current, two thirds of this part of the business being transacted by the branches.[1] Few of the indepen-

[1] The annual reports of the Reichsbank, given in the *Annalen des Deutschen Reichs*, show its loans of all kinds, deposits, notes, and cash, to have stood as follows for five years, the amounts being given in millions of marks:

	Loans.	*Deposits.*	*Notes.*	*Cash.*
Dec. 31, 1885 . .	540.5	261.2	858.9	655.6
" " 1886 . .	661.6	290.6	1,009.5	700.5
" " 1887 . .	648.1	331.9	1,010.5	794.7
" " 1888 . .	610.5	301.9	1,093.4	883.5
" " 1889 . .	739.9	347.8	1,160.5	764.5

dent banks have effected any such complete transformation. The Frankfort Bank has even diminished its accounts current heavily within a few years, while the Bremen Bank holds nearly all of its deposits subject to notice. After all, the note circulation of the German banks of issue, including the Reichsbank, is still nearly three times as important as their accounts current, although the latter show a marked growth.

The chief part of the investments made by the German banks, aside from their heavy reserve of specie, is in the form of discounts, which amount on the average to between two and three times their capital and surplus. They are authorized to lend upon the deposit of securities, merchandise, or bullion, and all of these forms of loan appear to be in practice.[1] The total amount, however, of the loans upon pledge (*Lombardgeschäft*) is not so great as one fifth of the loans by discount, and the proportion in which this total is divided between securities, merchandise, and bullion does not appear in the published accounts.[2]

Of the net profits of every bank, the law originally required that from so much as was earned in excess of a dividend of four and a half per cent., at least one fifth should be annually added to the surplus, until this should amount to one-

Division of the profits.

[1] Several of the branches of the Reichsbank are depots for goods, authorized by the Bank to lend upon the pledge of merchandise.

[2] The account of the Reichsbank for 1889 shows that of loans upon pledge amounting to over 186 millions, the loans upon merchandise were little over 5 millions.

fourth of the capital. But of the profits of the Reichsbank remaining after this allotment for surplus, it was also provided that an equal division should be made between the stockholders and the government, with the further cautious provision, that when the annual dividend of the stockholders reached eight per cent. the share of the government in any remainder of profit should be three quarters instead of one half. Under these arrangements the government has in some years received from the Bank a revenue of over 3,000,000 marks, the dividends to stockholders since 1875 having varied from five to seven per cent. and a fraction. But as the law provided that in 1891 and every ten years thereafter the government should have the option of discontinuing the Reichsbank or of taking it at a valuation, opportunity was given for making still better terms; and accordingly by the act of 1889 it is required that the ordinary dividend before the allotment to surplus shall be limited to three and a half per cent., and that six per cent. shall be the point at which shareholders begin to receive only one fourth of any further profit. The dividends of the independent banks vary greatly but do not now often exceed six per cent. The harvest of the German banks was from 1871 to 1875, when the Bank of Prussia divided from twelve to twenty per cent. annually, and the price of its shares stood between 170 and 250 per cent. The price of the shares of the Reichsbank now ranges in the neighborhood of 140.

NOTE.

In the *Annalen des Deutschen Reichs* for 1890, p. 952, is the balance sheet of the Reichsbank for December 31, 1889. Grouping some of the details for convenience, the account stands as follows, in millions of marks:

Liabilities.		*Resources.*	
Capital . . .	120.0	Gold bullion . .	244.7
Surplus . . .	25.9	German coin . .	489.9
Notes . . .	1,160.5	Treasury notes . .	16.6
Accounts current	347.8	Notes of banks .	13.3
Profits . . .	6.0	Bills discounted .	653.9
Sundries . . .	5.7	Loans on security .	186.2
To correct error in original . .	.6	Securities . . .	28.5
		Real estate . . .	21.3
		Sundries . . .	12.1
	1,666.5		1,666.5

It will be observed that according to this account the notes exceeded the cash on hand by 396 millions. As the uncovered issue allowed by the law is not quite 286.6, it follows that the Bank had issued notes in excess of the prescribed limit by about 109.6 millions for the last week of 1889. The error noted above is no doubt typographical and overstates some resource by 600,000 marks, but without any indication as to the particular figure overstated.

THE END.

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